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THE PALACE OF MINOS

A COMPARATIVE ACCOUNT OF THE SUCCESSIVE STAGES OF THE EARLY CRETAN CIVILIZATION AS ILLUSTRATED BY THE DISCOVERIES

AT KNOSSOS

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VOLUME II: PART II

TOWN-HOUSES IN KNOSSOS OF THE NEW ERA AND RESTORED WEST PALACE SECTION, WITH ITS STATE APPROACH

WITH FIGURES 224–559 IN THE TEXT, PLANS, COLOURED AND SUPPLEMENTARY PLATES, AND GENERAL PLANS OF THE PALACE IN POCKET AT THE END OF THE VOLUME

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C. The Palace of Knossos: restored Plan of Entrance System and *Piano Nobile* of West Section. Based on the results of the excavation, by F. G. Newton and Theodore Fyfe. [For the existing evidences see the special plans inserted in the book.]

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NOTE TO READER

There is a gap in the numeration between Figures 459 *and* 470.

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Part I

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195 end of n. 2, *read* Pl. XIII, 1104
224 n. 1, *read* Fig. 436, C
228 l. 15, *read* Fig. 199, A
238 l. 7 from below, *read* higher level
251 n. 2, *for* Fig. 47 *read* 470
275 n. 1, *read* vol. iv
350 l. 15, *read* Upper Long Corridor
352 l. 7, *for* originally at a higher level, *read* sunken beneath their original level

Part II

PAGE

422 l. 13, *read* black disks
436 l. 11, *read* white disks
437 l. 4, *read* Fig. 206, above
497 l. 20, *read* Fig. 304, *f*
508 l. 3, *for* and representing *read* and, *b*, representing
635 l. 8, *for* Isopata *read* Zafer Papoura
672 l. 5 from below, *read* Northern façade
730 n. 4, *read* by Tsuntas
778 n. 4, *for* Pl. XII, B *read* Pl. XIII, B
792 l. 4 from below and p. 793 l. 1, *for* South-East *read* South-West
816 l. 19, *for* Fig. 523 *read* 521

§ 50. 'House of the Chancel Screen' and 'Royal Villa'.

M. M. III a features of South-East House; Neighbouring 'House of the Chancel Screen'; Entrance and Plan; 'Megaron' with 'Chancel Screen' and dais for 'Seat of Honour'; Parallel with 'Royal Villa'; Earliest Pottery on floors M. M. III b; The 'Royal Villa'—its dramatic discovery; Plan of House; Double flights of Stairs; Fine Painted Jar in 'Palace Style' on landing; Lower Entrance System; Small private Court for householder; The 'Megaron'—Platform and niche within Balustrade; 'Seat of Honour'; Interspace designed as light-well; Analogies with Christian Basilica; Pillar Crypt—Channels and Vats for liquid offerings; Timber beams restored from indications preserved; One-columned Sanctuary above, connected by special staircase; Upper flights of main stairs; Principal Entrance probably from Upper Terrace; Upper 'Megaron' with Balustrade and Double Window (restored); Upper 'Megaron' within hail of Lower; Careful Choice of Site; Villa well adapted to be Summer Pleasance of Priest-Kings.

'The House of the Chancel Screen.'

M. M. III *a* features of 'S.E.' house.

The 'South-East House' has already been referred to as presenting in its Megaron porch column-bases of variegated stone of the earlier M. M. III class.[1] It may also be observed that the back wall of its pillar crypt shows, though in a restored condition, remains of ashlar masonry contained in wooden panels,[2] a typical M. M. III *a* form of structure, well illustrated in the Hall of the Double Axes.[3] This house, which still held M. M. III *b* pottery on some of its floors [4] and was distinguished by its early naturalistic wall-paintings of flowering reeds and Madonna lilies,[5] occupies an unique position among the private houses of this site. It seems to have been largely restored in M. M. III *b* and to have been cut finally short within the limits of the same epoch. While, on the one hand, it presents many structural resemblances to the houses with which we are at present concerned, it was, on the other hand, distinguished from them by the absence of any evidence of occupation during the early L. M. I phase.[6]

[1] *P. of M.*, i, pp. 425, 426. For the S.E. House, see, too, A. E., *Knossos, Report*, 1903, p. 4 seqq.

[2] See *P. of M.*, i, p. 428, Fig. 307.

[3] *Ibid.*, p. 349, Fig. 251.

[4] E. g. in the Pillar Room: *ibid.*, p. 429, and p. 537.

[5] *Ibid.*, pp. 537, 539, Fig. 390 and Coloured Plate VI.

[6] Some of its inner spaces were tenanted by squatters in the period of Reoccupation.

Neighbouring 'House of the

In this latter respect more continuity was displayed by a house that lay on the terrace immediately above it, occupying the space between its Western borders and the South-East Palace Angle on that side.

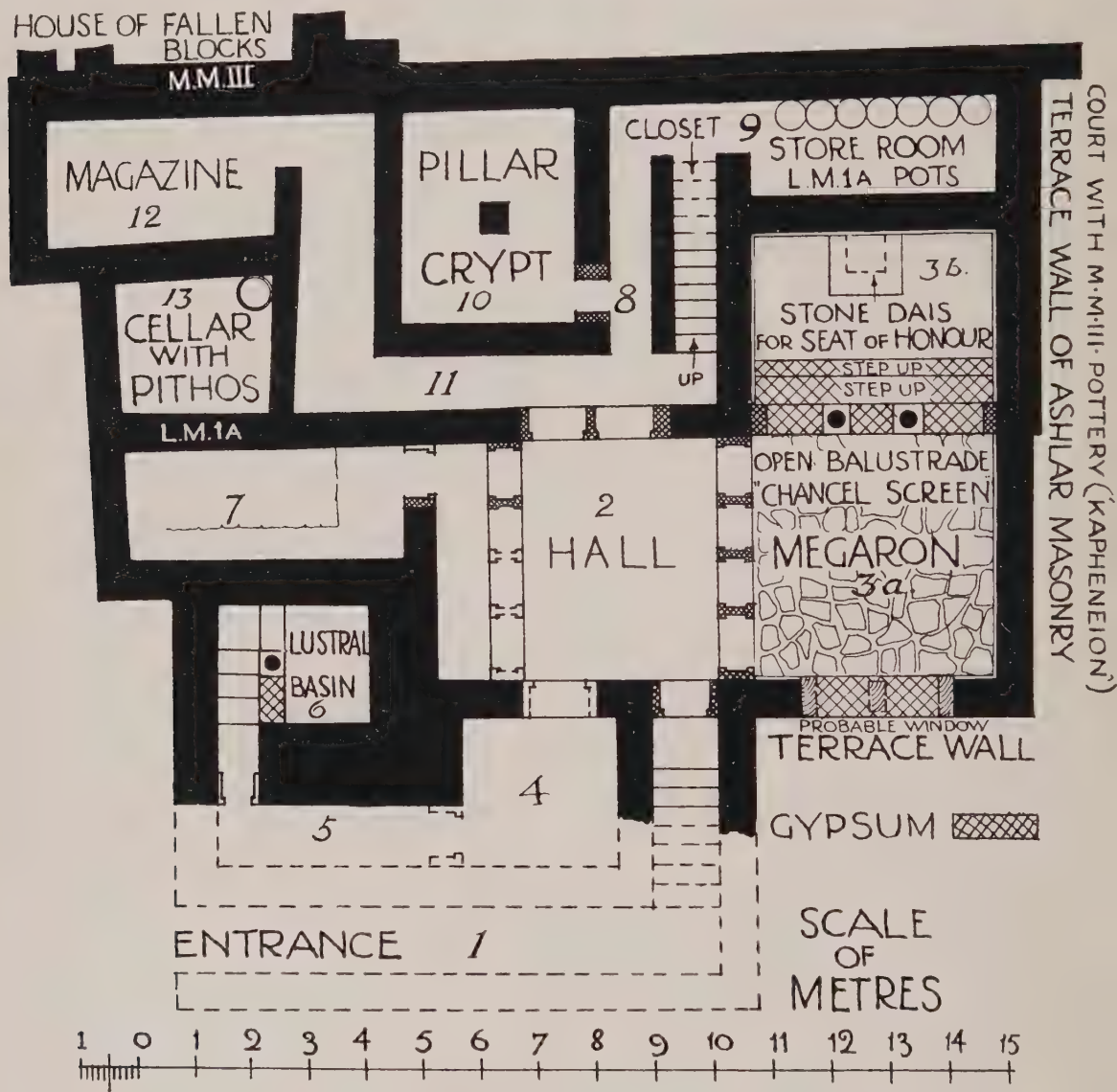


FIG. 224. PLAN OF 'HOUSE OF CHANCEL SCREEN' (WESTERN BORDER ABOVE).

Chancel Screen'. Entrance and plan.

Happily, in this case, we have a better clue to the position of the entrance than is usually forthcoming among the Minoan house-plans of Knossos. As will be seen from the Plan, Fig. 224, the central feature

of the building is a square Hall (2) with a doorway, controlled from within, in its North-East corner, opening on a stepped passage descending East. Owing to the situation on the slope and the proximity, beyond, of the South-East House, it is clear that this passage, after a descent of about eight steps, must have turned South and have reached the entrance by a short prolongation in that direction at the South-East angle of the building.

Another doorway in the South-East corner of the Central Hall would have given access to a 'Lustral Basin' on that side, of the usual form (6).[1] As in several other instances, its purificatory basins here stand in relation to the entrance system of the building.

A passage (11) behind the hall also gave easy access to another constantly recurring religious feature, the Pillar Crypt (10), and a small base found in this space evidently belonged to the column of a similar room above, an arrangement paralleled by the South House and the Royal Villa. As in those cases, too, it was flanked by a small staircase, giving convenient access to the upper floor.

'Megaron.'

The 'Megaron' or main living-room of the ground floor of the house (3 *a*, *b*) was entered by a row of four doorways on the North side of the Central Hall, its first section being probably lit by a window in its East wall, which runs above a terrace.

'Chancel Screen' and dais for seat of honour.

Parallel with 'Royal Villa'.

But the chief interest of the whole house centres in the approach and arrangement of the second section of the Megaron. This was entered by an opening between two wide projecting balustrades of the usual type with gypsum bases and a woodwork support of the upper slabs, from the ends of which rise square bases for columns (see Fig. 225). The whole might thus be said to form a kind of 'chancel screen', of the same kind as is illustrated below in the more perfect example in the Royal Villa.

At the inner edge of the interval between the balustrades were two shallow steps of gypsum, and against the centre of the back wall of the inner area was a raised square of rough stones which had evidently formed the basis of a stucco covering. Of the 'Seat of Honour' itself, that had rested on this little dais, there were in this case unfortunately no such remains as were found in the inner niche of the Megaron of the Royal Villa. It may well have been of wood, as was that of the Antechamber of the 'Room of the Throne'; indeed, the throne itself was an imitation of a wooden model. The inner chamber here was not a mere niche and

[1] Four steps, divided from the basin by a parapet with a column-base, lead down to a landing, whence the floor was reached by two more steps. The gypsum slabbing was much decayed.

narrow elongated space, as in the case of the Villa, but was almost equal in dimensions to the outer section of the hall.[1] The floor had been covered with plaster, remains of which were visible on the edge of the central dais. A restored view of the arrangement is given in Fig. 225, and, the better to

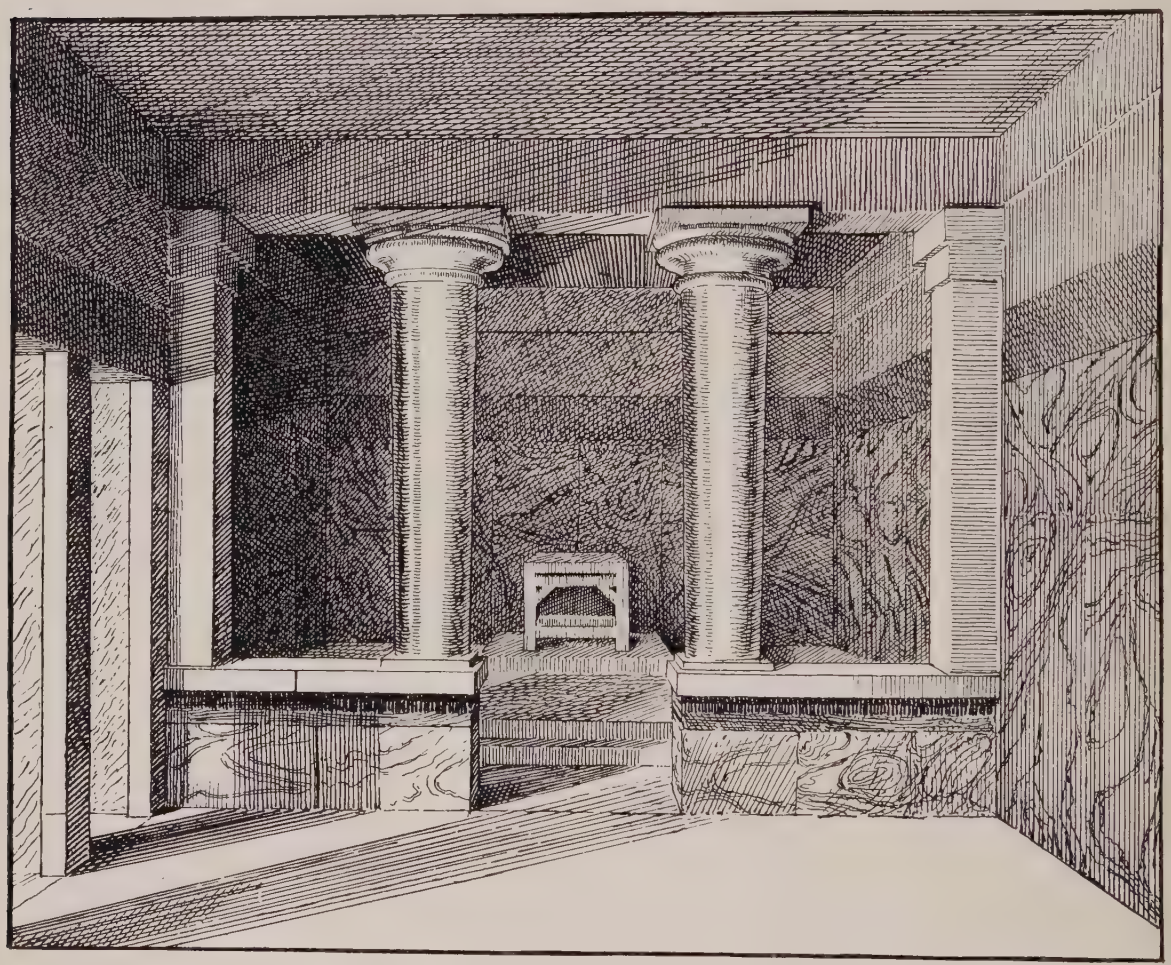


FIG. 225. WEST END OF MEGARON SHOWING 'CHANCEL SCREEN' AND DAIS, WITH SEAT OF HONOUR RESTORED.

preserve this interesting structure, the columns of the balustrades have been completed and the whole roofed over.

Taken in connexion with the parallel arrangement in the Royal Villa, to be described below, we have here a very interesting illustration of the

[1] The inner section was 4·25 m. wide (N. to S.) and 3·05 m. deep (E. to W.). The dimensions of the outer section were of the same width and 4·50 E. to W.

worshipful position of the head of the family in the Minoan household. As in Ancient Rome and in other primitive communities he seems indeed to have been endowed with priestly functions in regard to the household. Our workmen called the house *τοῦ παπὰ τὸ σπίτι*—'the house of the priest'.

A distinctly archaic impression is given by the paving of the outer section of the Megaron. This is not of gypsum slabs as usual at Knossos in the New Era—at least round the borders of such halls—down to the close of the last Palace epoch. The paving here consists of an irregular mosaic of a kind of 'iron-stone' (*ἀμυγδαλόλιθος*),[1] characteristic of an earlier Middle Minoan stage, extending in every direction right up to the walls.[2]

Earliest pottery M. M. III *b*.

It is also an interesting fact that the back wall of the old 'House of the Fallen Blocks', a M. M. III *a* construction overwhelmed at the time of the earthquake, was used for the Magazine (12) that occupies the South-West angle of the house. In the space East of this is a square, doorless cellar to which access must have been obtained by a ladder from the floor above. In this was found a *pithos* of a transitional M. M. III *b* type such as recurs at Tylissos and in the 'North-East House', the conventional rope moulding on which is illustrated below,[3] and beside it a L. M. I *a* ewer with spiral decoration and details in the evanescent white then in use. The best remains of pottery, however, came to light on the floor of a magazine behind the inner section of the Megaron. Its character was remarkable, since, besides many cups of the 'Vapheio' shape with a roll round their middle and the usual spiral, dark on light, decoration of L. M. I *a*, there was a series of one-handled pitchers ranged along the West wall, with the purplish brown, lack-lustre glaze of M. M. III and metallic ring-collar, practically indistinguishable from those of the Temple

[1] A 'mosaiko' central panel of 'almond-stone' is, of course, of frequent occurrence at times, as in the 'House of the Frescoes', surrounded by plaster. In the earlier period of the excavation such paved 'panels' were at times taken for 'altar bases', e. g. West of the bastion of the Upper Propylon and West of the system to which the Shrine of the Double Axes belongs. We also see these panels in the 'Room of the Throne' and its ante-room, belonging to the last Palace period.

[2] The early date of this pavement was proved by supplementary excavations conducted by me here in 1926. In the N.E. corner, where some disturbance had occurred the superficial deposit beneath the slabs contained M. M. II, M. M. III *a*, and one or two M. M. III *b* sherds, and at about 30 cm. down the pottery became almost entirely M. M. III *a*. Under a large slab of the same hard stone immediately in front of the opening in the balustrade, where intrusive elements could hardly have made their way, the pottery was pure M. M. I *a*. There seems to have been a lacuna in the story of its occupation, but the evidence tends to show that the pavement was not later than the beginning of M. M. III *b* and may have been earlier.

[3] See pp. 418, 419 and Figs. 241 *a*, 241 *b*

Repositories. They obviously represented the class of pottery still in vogue when the house was rebuilt after the great catastrophe, and afford an exact parallel to the presence of some M. M. III *b* 'medallion' *pithoi* in the restored Magazines of the Palace and, again, in the 'North-East House' described below.[1] The earliest Late Minoan ceramic style had not yet declared itself at the time when they were placed in this store-room.

There are indications that, besides the 'South-East House', a further series of private dwellings of more or less contemporary date, starting from below this, extended beneath the lower wall-lines of the Palace along the Eastern slope. Approaching the point where the main built drain of the Domestic Quarter found its issue down the steep, the incomplete and inarticulate remains of another house are visible containing a small light-area, and North of the exit below the East Bastion there are traces of other houses. It was, however, still farther to the North along the slope that some chance indications led to the discovery of a Minoan residence of quite exceptional interest.

The Royal Villa.

Well-chosen site of 'Royal Villa'.

Built into a cutting in the hill-side and overlooking the glen of the ancient Kairatos stream, there came to light, about a hundred metres N.N.E. of the North-East Palace Angle, a Minoan house which, though it cannot compare in size with the 'Little Palace' described below, presents a specially elegant aspect in its material and arrangements. The 'Royal Villa', as it has been called, was discovered in a quite dramatic manner. Two pairs of protruding door-jambs at the foot of the steep bank below a mule path having been brought out by autumn rains, an exploratory tunnel was started between the more Northerly of these. By a fortunate coincidence this followed the inner course of the original entrance passage, with a wall of good masonry on the right side that helped to support the superincumbent materials. At a distance of 5·70 metres, a double doorway appeared in this, afterwards known to be the entrance of the principal Megaron, and the tunnel was continued along the well-paved gangway till, at 9·80 metres, its progress was stopped in this direction by the appearance of a crosswall, the fine gypsum blocks of which, as seen by the light of our candles, had a very promising appearance. A flight of gypsum stairs now appeared on the left, up which our workmen mined their way to a landing ten steps up. The remains had by now assumed such importance that no other course was open to us, if the work was to be continued, than to divert the mule path to the terrace level above by building a supporting wall 7 to 8 metres high.

Its dramatic discovery.

[1] See below, p. 415 seqq.

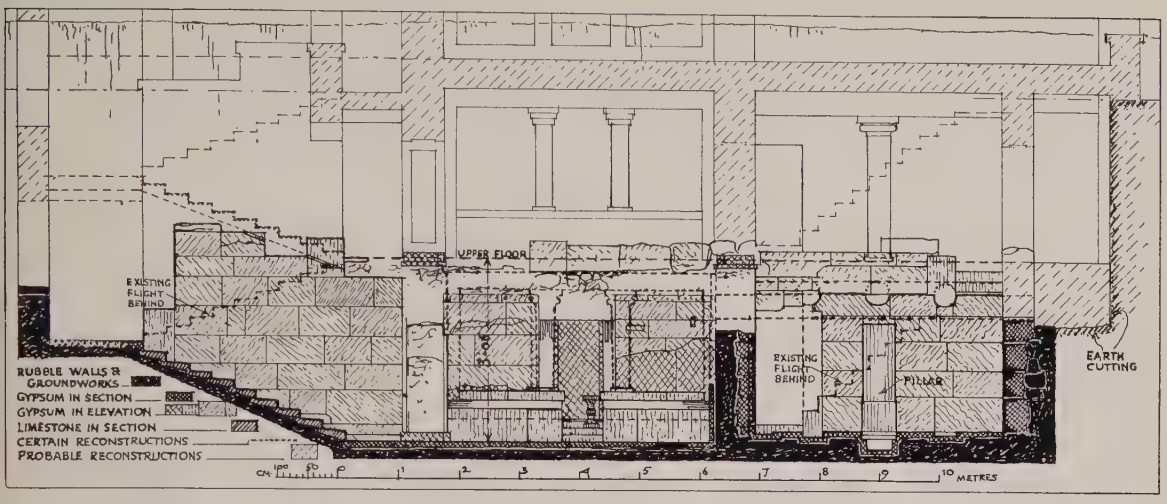


FIG. 226. LONGITUDINAL SECTION OF 'ROYAL VILLA'; BY THEODORE FYFE, F.R.I.B.A.

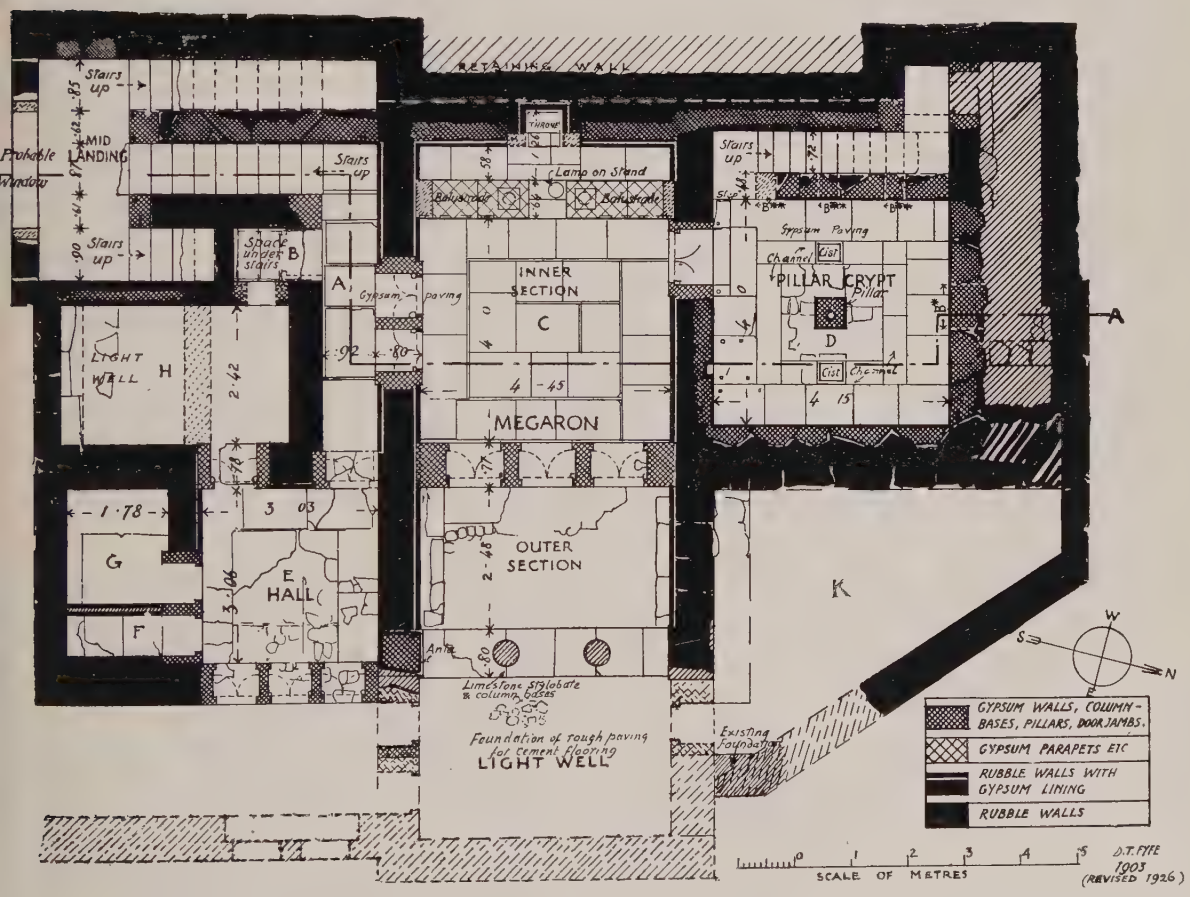


FIG. 227. PLAN OF GROUND FLOOR OF 'ROYAL VILLA'; BY THEODORE FYFE.

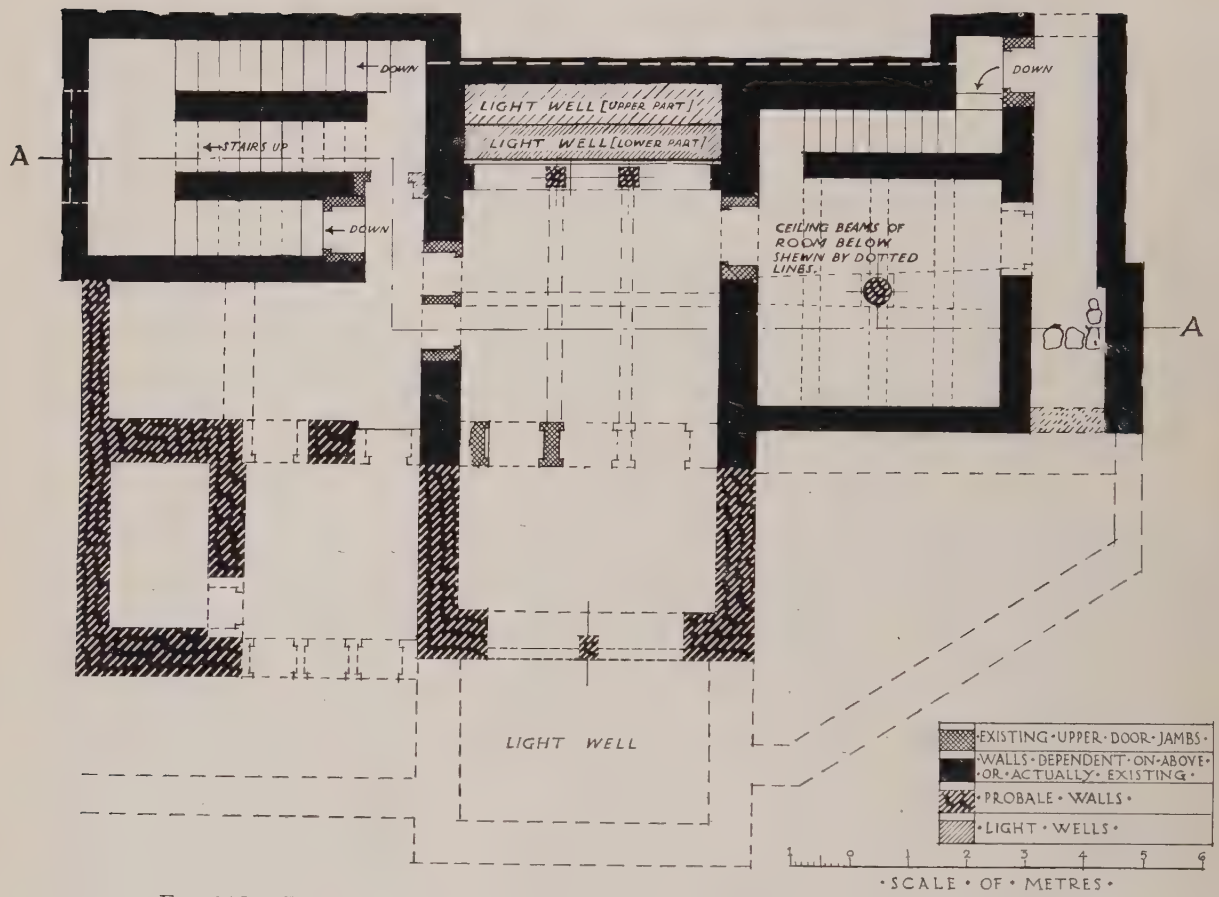


FIG. 228. PLAN OF UPPER STORY, 'ROYAL VILLA'; BY THEODORE FYFE, F.R.I.B.A.

This having been done, at the cost of much labour and expense, it was at last possible to begin an excavation from above, which finally brought out remains of a house in a singular state of preservation.[1]

Plan of house.

A plan and section of the ground floor and the story above, by Mr. Theodore Fyfe, is given in Figs. 226–8. The eye is at once struck by the triple formation of the main staircase, showing a central flight and two wings—a sumptuous and quite exceptional arrangement, surprising in a house of this size (see Fig. 229). Traces of the first steps of the central flight above, starting from a landing on the second floor, were preserved on its West wall,[2] and it is fairly clear that the whole system was repeated as far at

[1] A fuller account of the details of this excavation has been given by me in *Knossos, Report*, 1903, pp. 130–53. Further evidence came out in the course of supplementary researches undertaken in 1926.

[2] A triangular ledge is seen on the landing block at the top on the E. side for the support of the first steps of an upper stairway and

least as the third floor. Since the chief intercourse of the occupants of the house would have been with the Palace and Town on the slope above, there are good reasons for supposing that, as in the case of the Domestic Quarter of the Palace, the principal entrance was on the terrace level above

Double flights of stairs.

Fig. 229. Stone Stairs with Double Wings, 'Royal Villa'.

the cutting in which the house is set. As a matter of fact there is evidence of a direct line of communication between the North-Western entrance system of the Palace and this house. Immediately above the stepped 'Theatral Area', the paved causeway that there appears, heading towards the North Gate, shows a North-East branch which, if prolonged, would run past the South-East angle of the 'North Pillar Hall' in a straight line to the

a slanting groove for further steps on the second. At a somewhat higher level the continued course of the ascending stairs is found to pass immediately over the corner of the flat slab marked × in Mr. Fyfe's original section.

middle of the West wall of the 'Royal Villa',[1] a distance of about 160 metres. It was thus in a way, as the 'Little Palace' described below was in other respects, a real dependency of the Palace.

An exceptional feature of the staircase was the facing of the West wall of the lower flight and both walls of the Western wing above with gypsum masonry (Fig. 230). It is interesting to observe, however, that the gypsum blocks of the lower flight and of the adjoining part of the passage beyond were coated with red-faced plaster.[2]

Fig. 230. Central Lower Flight of Staircase, showing Gypsum Blocks of West Wall.

Fine painted jar on landing: L. M. II.

In keeping with the stately character of this triple staircase was the discovery above the first landing, and clearly sunken from that above, of a tall jar a metre and a fifth high, supplying an early example of the later 'Palace Style'. It presents magnificent painted decorations in relief, consisting of papyrus clumps, the stalks of which are linked by wavy lines in which we may recognize a reminiscence of the traditional Egyptian rendering of water in Nilotic scenes. With it was a very beautiful stirrup vase of the same L. M. II date with conventional flowers (Fig. 239, *a*, *b*, p. 413). Placed on the principal landing of the staircase, the jar may be regarded as having been intended to fulfil an architectonic function, and it is therefore reproduced here (Fig. 231), though it belongs to the closing epoch of the Villa. It supplies a fine illustration of the later 'Palace Style'.[3]

[1] See above, Sketch-plan of the Palace and its Surroundings, Fig. 71, p. 140.

[2] The steps and walls of the landing above were also originally covered with painted stucco.

[3] The last pottery found here on the floor levels belonged to L. M. II *b*, though in the South-East rooms especially sherds of the Reoccupation period (L. M. III *b*) were found at a higher level.

FIG. 231. PAINTED JAR IN LATER 'PALACE STYLE' FROM STAIRCASE LANDING OF 'ROYAL VILLA'.

The stairs were lit by windows looking on to a small space on the South bordered beyond by some other construction. Parts of the stone sill of the window on the lower landing were preserved, which must have been just over 2 metres in breadth.

Lower entrance system.

It is clear that the entrance below was from the S.E. angle of the house. The passage way that we may here assume was flanked on its West side by a triple system of doorways opening on a small square hall (see Plan, Fig. 227, A). This presents some analogies in its position with that of the 'House of the Chancel Screen', and it seems possible that in this case, too, the entrance passage may have given access in its initial course to a 'Lustral Basin', but the remains at this point are entirely denuded. On the left of this hall are two doorways, one of them opening into a small square space that may possibly have served as a bath-room (G). It is divided by a narrow partition from a small closet (F). The back wall of this hall presents two more doorways, that to the right opening on the inner section of the main passage leading to the lower flight of the staircase, and communicating on its way by a double door opening with the inner section of the 'Megaron' or principal chamber of the house. It was along this passage that the first entrance to the building was tunnelled.

Small private court.

The left doorway of the back wall of the hall led into a small private court (II), the walls of which were formed of good limestone masonry. The North end of this was roofed over and afforded a convenient shaded *exedra*, while, for those who wished to sit in the sun, a stone bench of which some traces remained seems to have been provided along the foot of the Southern wall of the little light-area. These arrangements were only brought out during the supplementary excavations undertaken by me in 1926, and it was then further discovered that there was also a door at the Western end of the covered section of this area, leading, by a space beneath the stairs (B)—that had previously been regarded as a small closet—to the double entrance of the inner compartment of the 'Megaron'. For the master of the house, there somewhat ceremonially enthroned, it was thus only a matter of a few steps to find a secluded seat in the sun or shade—an arrangement which must have greatly added to the amenity of his abode.

The Entrance Corridor, after passing the three doorways of the hall (II), abutted, probably by two doorways at its North end,[1] on the light-area of the 'Megaron', which not only occupies the central position, but is certainly the principal centre of interest in the whole building.

The 'Megaron'.

The light-area of the 'Megaron', the containing walls of which had

[1] A jamb of one of these was preserved.

disappeared owing to the slope, showed in places remains of the rough paving below its cement floor. It opened on the North side on what seems to have been a sub-triangular yard, with a stone platform in its nearer corner.

The 'Megaron' itself was faced on the side of its light-area by a lime-stone stylobate with two column-bases of the same material which would

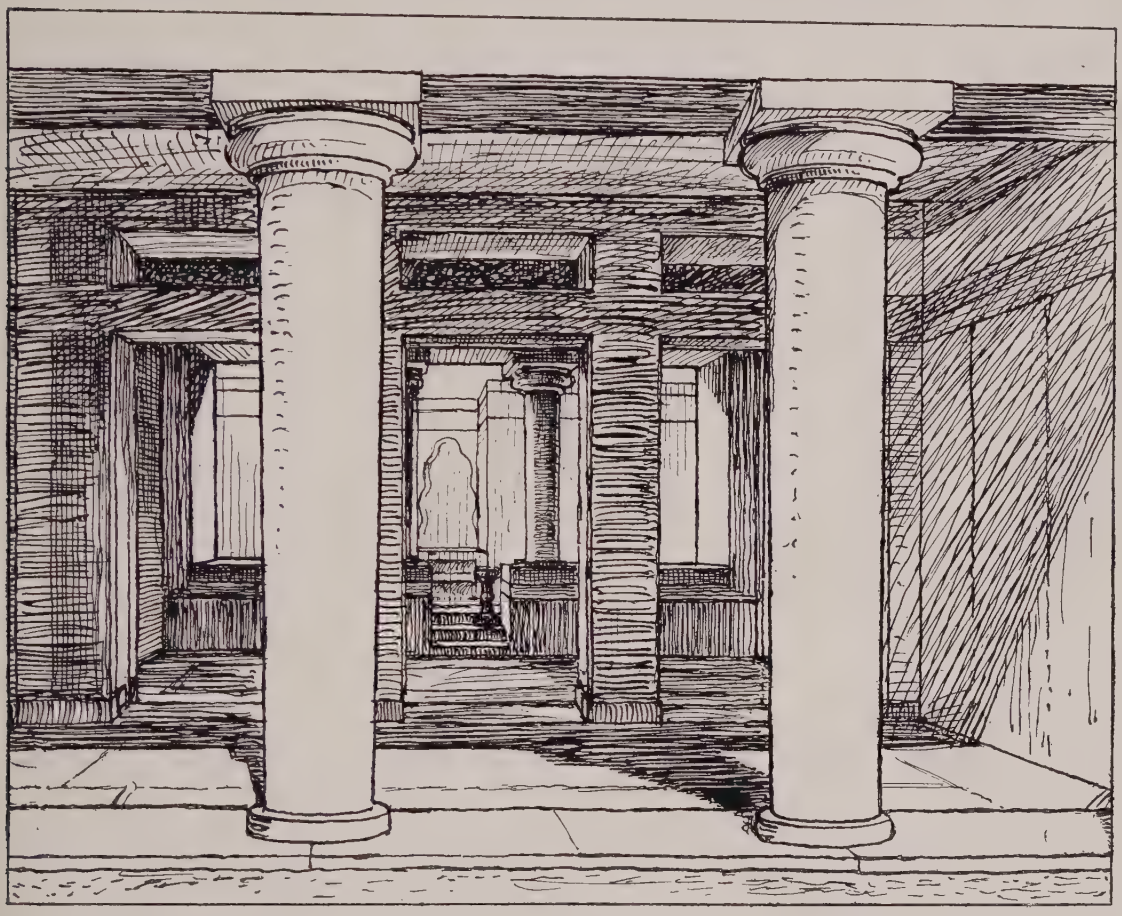


FIG. 232. VIEW OF THE 'MEGARON' OF THE 'ROYAL VILLA' FROM THE EAST END.

have attained a height of 2·56 metres (Fig. 232). These, with the roof above and the door-posts of the four gypsum jambs leading to the interior section beyond, have been now restored.[1] The column-bases were some-what asymmetrically arranged, that to the North being slightly nearer the *anta* on that side. The South *anta*, of which a sketch by Mr. Theodore Fyfe is given in Fig. 233, affords a good example of this Minoan feature.

[1] This was part of the work of reconstitution undertaken in 1926.

Within the second section of the 'Megaron' the gypsum dado slabs, rising to a height of about 2 metres, are in places well preserved, as also the slabs of the floor, showing red-faced stucco in their interstices and framing a central square (see Plan, Fig. 227, c). The inner space of the 'Megaron', which itself formed a quadrangle 4·45 metres by 4, was entered from near the foot of the stairs by a double doorway. On its West border was a balustrade of the usual kind, showing the square bases for two small columns, and with a two-stepped opening 62 centimetres wide in the middle, on the second step of which there stood intact an elegant pedestalled lamp of lilac gypsum. The stepped opening led up to a platform, of the width of the chamber (4·45 m.), also paved with gypsum slabs, and only 58 centimetres deep, while beyond this a niche 68 centimetres deep, similarly paved and lined with a gypsum dado, contained the remains of a throne or seat of honour of the same material. A sketch by Mr. Theodore Fyfe of the West end of the 'Megaron' as excavated is given in Suppl. Pl. XX A, and Fig. 234 gives a photographic view of the same with the roof and the supporting columns above the balustrade restored. It will be seen at once that the arrangement of the balustrade and the seat of honour within affords a striking analogy to the inner section of the Megaron of the 'House of the Chancel Screen'.

Platform and niche within balustrade.

Seat of Honour.

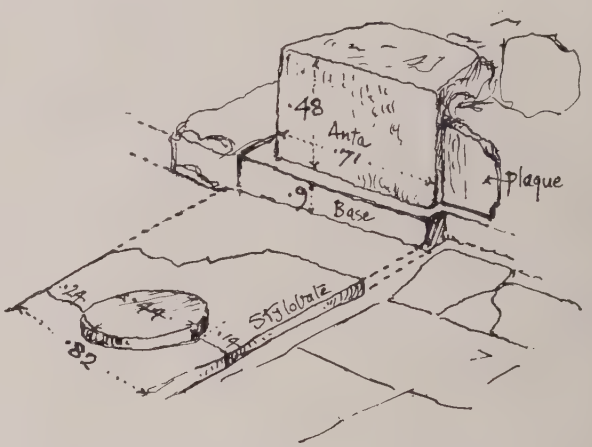


Fig. 233. Centre Block of Colonnade to Eastern Light-area of 'Megaron'.

The total length of the 'Megaron', including the platform, but exclusive of the East light-area, was 9·27 metres or about $32\frac{1}{2}$ feet. Several gypsum posts and bars with grooves for the insertion of cross-pieces were found more or less *in situ* by the niche, but the remains of the seat are too incomplete to admit of any satisfactory reconstruction.

Inter-space designed as light-well.

Narrow as was the space in front of the seat it is clear that it had been devised as a light-well. It was found, in fact, to step back above in a manner analogous to the wall of the Southern light-area of the 'Queen's Megaron'. That it was sheltered, at a higher level than the story immediately above, by some kind of clerestory or hooding to ward off the direct effects of the

elements, is shown by the fact that the pavement and lining of the walls was of gypsum, which is disintegrated by moisture, instead of the limestone facing and *tarazza* cement floor usual in the case of light-wells. In any case only

FIG. 234. WEST END OF 'MEGARON', SHOWING COLUMNS OF BALUSTRADE RESTORED AND REMAINS OF SEAT OF HONOUR IN RECESS BEYOND.

reflected light could have penetrated to the niche, and it is not surprising that the stone lamp should have been found on the step in front of it.

The endeavour to secure light by means of a shaft is characteristically Minoan, as was also the use of door-jambs—no doubt generally open and

with light openings above—in place of pillars in the body of the room. But, *mutatis mutandis*, it is impossible not to be struck by the curious parallel here presented to the Early Christian Basilica.[1] All the main elements of this seem, indeed, to be anticipated. We have here the pillar hall with a triple division, a raised *tribunal*, with its *cancelli* and *exedra*, in the central niche of which is the seat of honour answering to the place of the episcopal throne in the Christian building. But this comparison becomes still more suggestive when we recall the historic origin of the basilica, Christian and Roman, from the *Βασιλική* or *στοὰ βασίλειος* of the Archôn Basileus at Athens, himself the sacral representative of earlier Priest-Kings. That the pillar hall of the Archôn Basileus must eventually be sought in the Megaron of a prehistoric Palace had been already recognized, but this was at a time when comparisons were perforce confined to theoretic reconstructions of Homeric halls by the light of later Greek houses.[2]

Analogies with Christian basilica.

A doorway in the North-West corner of the inner Section of the Megaron—representing the shortest cut from the seat of honour to the sacred pillar beyond—gave access to a pillar crypt, better preserved and of finer construction than any other known example of such cult chambers[3] (Fig. 234). Its walls—a quite exceptional case in covered areas—were formed of ashlar masonry, consisting of fine gypsum blocks.[4] Two blocks of the pillar itself were preserved of the same material, a cubical one below, and above it another of elongated form. The pillar was set on a square of gypsum pavement, itself bordered by a sunken channel, 42 cm. wide and 6 cm. deep (see Plan, Fig. 227, and Fig. 235). In this channel, East and West of the pillar, were two oblong receptacles answering to similar stone 'vats' associated with so many of these pillar crypts. The vats in this case, taken in connexion with the sunken square and shallow channel, were clearly part of a system designed for draining off and collecting liquid offerings poured before the sacred pillar. A scene such as that shown on the Hagia Triada sarcophagus rises before us in which the votary pours libations from a kind

Pillar crypt.

Channels and vats for liquid offerings.

[1] See my remarks, *Knossos*, *Report*, 1903, pp. 147, 148.

[2] *Op. cit.*, p. 148, cf. K. Lange, *Haus und Halle: Studien zur Geschichte des antiken Wohnhauses und der Basilika* (Leipzig, 1885).

[3] On the Minoan Pillar Crypts see *P. of M.*, i, p. 396 seqq. and pp. 322, 323, above. The dimensions of this were 4·15 m. N.–S. and 4 m. E.–W. Round the pillar was a central square of paving of the same size as that forming the centre of the neighbouring section of the Megaron. In this case it was surrounded by a slightly raised frame of slabbing.

[4] These display an interesting economy of material, the two sides of the inner part of the block forming acute angles, so that the block itself was of a triangular form. Four of these could thus be cut out of a large gypsum block with a minimum of waste.

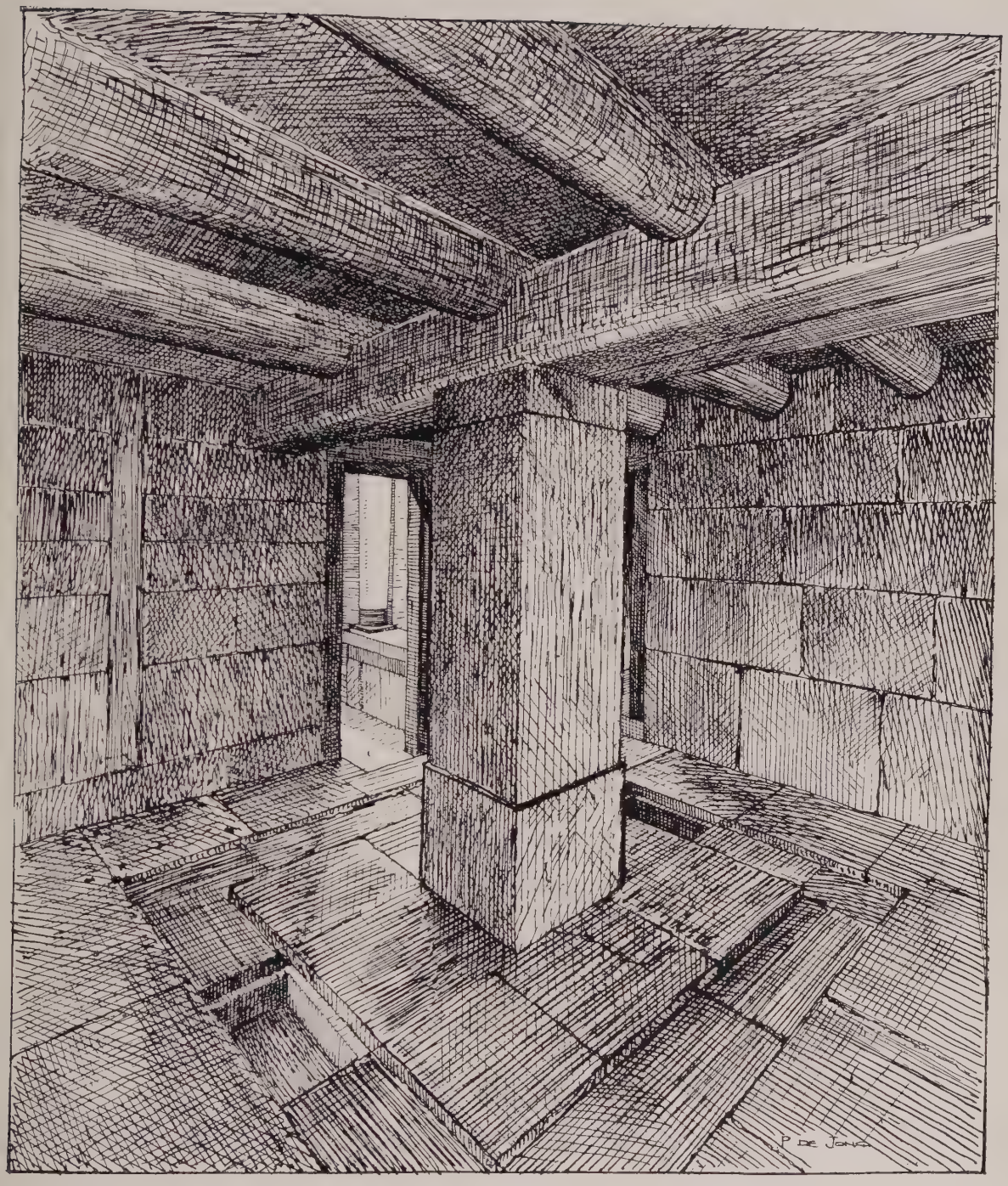


Fig. 235. Interior of Pillar Crypt of 'Royal Villa' with Wooden Beams reconstituted.

of two-handled pail: but there the red liquid was poured into a larger receptacle between the two Double Axes.[1] In the present case the arrangements were made to meet a greater diffusion of the offertory liquid, and point perhaps to actual sacrifice within the chamber, the receptacles being filled with the blood of the victim.

Indications preserved of timber beams.

The Pillar Crypt as usual had no window and must have been entirely lighted by artificial means. Of great interest was the unique evidence here afforded of the size and shape of its ceiling beams, the sockets for which were still visible though the woodwork itself had been long carbonized. The character of the main beam that rested on the pillar and ran North and South is clear. It was formed of a split tree-trunk, the outline of which is indicated tapering from a width of 80 cm. at its original lower end to about 50 cm. In the West wall, moreover, were rounded sockets for three cross rafters, which had to a great extent preserved the natural form of smaller trunks, and were at a height sufficient to rest on the main beam. It has thus been possible by means of reinforced concrete to reproduce in its entirety not only the original arrangement but the actual shapes of the timbering supports of the floor above (see Fig. 235).

One-columned sanctuary above connected by special staircase.

As in the South House, the Pillar Crypt here was flanked by a small staircase approached through an opening in the South-West Corner of the room. From the stair-head a short intervening turn of a passage led, as in the other case, to an upper chamber of the same dimensions as the Crypt below, the pillar of which would have performed an actual structural function in supporting a column above (see Section, Fig. 226). This upper columnar chamber, of which we have other indications, seems to have been the scene of a more public form of worship than the rites that were performed in the crypt below. The columnar hall of the West Section of the Palace which covered the area of two pillar crypts below stood unquestionably in connexion with a small sacristy in which sacred vessels were kept. The wonderful steatite 'rhyton' in the form of a bull's head with crystal eyes, found in the 'Little Palace', stood in the same way in relation with a columnar chamber above a basement room containing two pillars.[2]

Upper flights of main stairs.

Above the Megaron itself are traces of an important upper chamber brought into easy connexion with it by the staircase with its double branches. It looks, indeed, as if the Eastern of these upper flights, which, unlike the other was provided with a doorway near the point where it reaches the landing, had been reserved for the exclusive use of this upper hall, the other

[1] See *P. of M.*, i, p. 440, Fig. 317.

[2] See below, p. 525.

flight and that which runs up from this level having been capable of being shut off in some way. Thus, assuming that there existed a main entrance from the upper terrace, circulation between this and the lower floor would pass apart from what may best be styled the 'Upper Megaron', and greater privacy would be ensured to it. This object was, in fact, the *raison d'être* of the bifurcated staircase.

Main entrance probably from upper terrace.

It has been possible to restore all the essential elements of the arrangement of this Upper Megaron (see Fig. 237). Most of the door-jambs and a good deal of the lower part of the North and South walls were preserved in position. The hall was entered by a double doorway near the staircase landing. It was divided into two sections, answering to those below, by a similar line of three door openings, the jambs of the first two of which remain *in situ*, while a doorway, also preserved, immediately above that leading to the pillar crypt, opened into the square columnar sanctuary beyond (see Fig. 237, to left above).

Upper Megaron with balustrade.

It is a safe assumption that a balustrade answering to that below—though without the central opening and slightly less broad—ran along the West border of the inner section, overlooking the niche with the seat of honour and the narrow platform below. More light would have reached this inner end of the Upper Megaron than could have penetrated below from the clerestory above the shaft. In restoring the Eastern wall-line above the two column-bases a double window has been introduced looking over the light-area on that side (see Fig. 237). An open balustrade on that side as well as the other is ruled out, as the hall would have been rendered too draughty.

Restored double window.

The windows have been reconstructed on the analogy of that preserved in the 'Megaron' of the South House, with narrow sills and a breast-work, such as would have enabled the occupants of the upper room to loll out comfortably over the little Court. It is thus that the ladies are depicted in the windows of the little shrine on the fresco fragment from Mycenae, with their arms thrown over the window openings (Fig. 236).[1]

The 'Upper Megaron' was thus the complement to the lower, and both to a certain extent form a single unit. The height of the 'seat of honour' below points to its having been made for male use, and it is natural to suppose that this upper room with its greater privacy was reserved for women.

The intimate relation between the balustrade and the niche below, increased by the slight rising of its floor, is shown by the section (Fig. 238).

[1] Repeated here from *P. of M.*, i, p. 444, Fig. 320.

Upper Megaron within hall of lower.

The facilities of intercourse generally secured by the Minoan light-well system were here improved on by the very artful method of construction. The master of the house, seated in the raised alcove, could, as it were, control the occupants of both floors. If he wished to speak, let us say, to Ariadne he had hardly to raise his voice to call her to the balcony opposite. Conversation could be held on both sides, and, if there were music or song in

Fig. 236. Ladies lolling out of Windows of Sanctuary Building on Fresco Fragment from Mycenae.

the ladies' chamber, their lord, and whoever may have stood on the narrow platform beside the niche, might have the full enjoyment of it. The life of a household rises before us, as it was carried on some sixteen centuries before our era.

Careful choice of aspect.

In their choice of position the builders of the 'Royal Villa', by setting it in a cutting facing East, had sought to secure the greatest amount of protection, on the one hand, from the hot sun, and on the other, from the prevailing North and South winds. The same careful selection of aspect and situation recurs in the case of the Domestic Quarter of the Palace, in that of the fine unexplored mansion, the façade of which appears in the

FIG. 237. RESTORED UPPER STORY OF 'ROYAL VILLA'.

cutting beyond the Little Palace and, it may be added, of the small Palace of Hagia Triada on the other side of the Island. The house was not only thus itself cool and sheltered, but it directly bordered the well-watered glen of the Kairatos, with its mill-stream and irrigation channels, shaded to-day with oriental plane-trees. Here and there stand out stray 'horizontal' cypresses —last relic of the primeval forest growth, as, later on, of the sacred Grove of Rhea—while the scattered clumps of wild palms may have owed their first implantation to Minoan hands. The gnarled and ancient olive-trees may well themselves date back beyond the Venetian occupation. Lemons, almond trees, and pomegranates with their scarlet flowers, in the smaller enclosures, call up more ancient gardens. At the same time, when we bear in mind the elaborate bathing arrangements of the 'Caravanserai' connected with the springs on that side, we may well believe that artificial baths had existed here too on a larger scale.

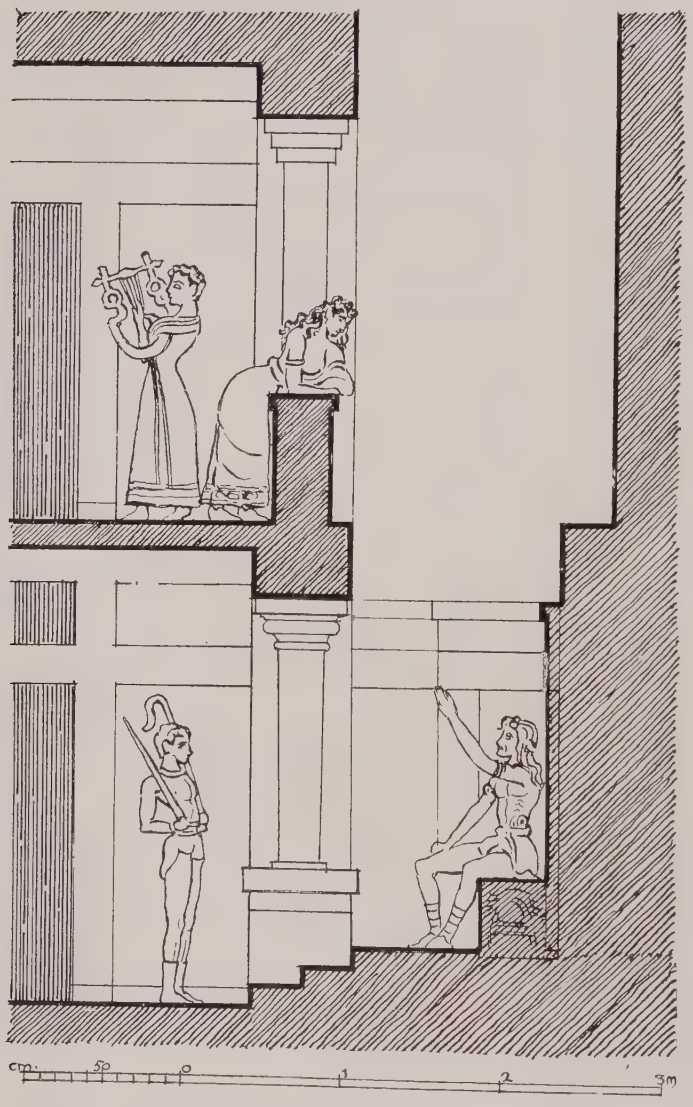


FIG. 238. SECTION OF WEST LIGHT-AREA OF 'ROYAL VILLA' SHOWING HOOD ABOVE AND NICHE WITH SEAT OF HONOUR BELOW. BY THEODORE FYFE.

Taken in connexion with the carefully selected site of the building,

its exceptionally fine material and sumptuous appointments, with its royally designed hall, its seat of honour at one end, and the massive pillar crypt for religious ceremonies in such a remarkably handy position at its side, it will hardly be thought an extravagant suggestion that the Villa here excavated may have served as a summer pleasance of the Knossian Priest-Kings. It seems, as we have seen, to have had a direct line of communication from its upper terrace with the North-West entrance system of the Palace, and the significant fact may be added that, while, so far as it has been possible to ascertain, all private houses within the same range of the Palace were cut short in the course of the First Late Minoan Period, the 'Royal Villa'—as is well shown by the magnificent jar on its staircase landing—was allowed to remain intact and in a flourishing condition till the days of the final overthrow of the great building.[1]

Villa well adapted to be summer pleasance of Priest-Kings.

[1] It is to be noted that, as in the case of some of the Palace chambers, the basement rooms were later reoccupied and contained a great deal of L. M. III pottery.

a *b*

FIG. 239. STIRRUP VASE (L. M. II) FROM STAIRCASE LANDING, 'ROYAL VILLA'. FOUND WITH LARGE 'PALACE STYLE' JAR (FIG. 231, p. 401). See above, p. 400.

§ 51. The North-East House and the Import of its Contents—M. M. III *b* and L. M. I *a*: 'Pithoid Jar' Type and Minoan 'Amphoras'.

Private Houses on North border of Palace; the 'North Pillar-Crypt'—part of considerable building; 'North-West House'—its Bronze Hoard; Discovery of 'North-East House'—dated by contents M. M. III b–*L. M. I; Its ground-plan; Upper and lower entrances; Series of Magazines with 'Medallion' and conventional roped* pithoi—*both M. M. III* b; *Inscribed sealing presenting Lion's head 'rhyton' like that from Fourth Shaft Grave, Mycenae; Seal-impressions with conventional façade of building—typical of M. M. III; Was the building used for Palace Stores? Except* pithoi, *great bulk of pottery L. M. I* a; *'Pithoid amphora' type; Preserves tradition of* pithoi *of earlier Magazines; Bronze 'pithoid Amphora' borne by Minoan in Senmut Tomb; Parallel class of 'pithoid jars' with two, instead of three, rows of handles; Originates in a primitive 'two-storied' class; Handles derived from 'pithoid jars' survive on L. M. I* b *'amphoras'—these disappear before L. M. II; Specimen of 'pithoid amphora', L. M. I* b, *from Tylissos with 'marine' and festoon ornaments; Beaded festoons and floral pendants derived from jewels of fresco figures.*

Private houses on N. border of Palace.

It is clear that at the beginning of the New Era a succession of private houses also followed the Northern borders of the Palace.

It is probable, as already noted, that the 'Royal Villa' formed the goal of a line of Minoan paved way, the initial course of which starts from the South extremity of the 'Theatral Area' and points in this direction. This would have served the building known as the 'North Pillar Crypt'[1] that lies about 25 metres North of the entrance hall of the Palace on that side.

'N. Pillar Crypt.'

This structure, named after its most prominent feature, was no doubt part of a large building which may well have had its domestic as well as its religious side. As in the case of the South-East House, its foundation clearly goes back to the early part of M. M. III. Whether or not it was restored at the beginning of the New Era remains uncertain, but from the

[1] See *P. of M.*, i, p. 400 seqq. and Fig. 289. Mr. Doll's plan, Fig. 290 (and see p. 401) has a central pair of pillars conjecturally shown between the Northern and Southern pairs. But the evidence that has since accumulated of the wide spans traversed by Minoan beams makes it unnecessary to suppose that such a central pair of pillars existed. There was no trace of any foundations at the points indicated.

numerous L. M. III sherds found within its walls it is clear that it shared the partial reoccupation traceable elsewhere both in and around the Palace area.

'N.-West House'.

A little to the West of it, opposite the North-West Angle of the Palace, basements came to light of another good-sized house, which seems to have repeated the story and experienced the vicissitudes of the other private residences built along the Palace borders after the great catastrophe towards the end of M. M. III. These basements contained on their floors clay vessels and fragments of others, including remains of *pithoi* of the M. M. III *b* class, described below in relation to the North-East House, and, as there also, typical L. M. I *a* painted vases supply a landmark of contemporary destruction. Here, in a closet-like recess in one of the basement spaces, was also brought to light an important hoard of bronze tripod cauldrons and tools and dagger-blades, described below in the Section dealing with a series of similar bronze hoards. Rough L. M. I pots were associated with these.

Its bronze hoard.

It is possible that a North-Western Court of the Palace, of which there are some indications, may have extended to the borders of this house. Farther East, supplementary researches may eventually bring out traces of structures near the Northern wall-line of the Palace, due to the same era of house-building activity.

'N.-East House'—M.M. III *b*–L.M. I *a*.

By the North-East corner of the Palace and a little to the South-West of 'the Royal Villa' there were in fact discovered remains of a house, of exceptional dimensions, and which indeed must be regarded as one of those built nearest to the actual enceinte at this epoch of restoration. Its Southern wall was not more than two and a half metres distant from the North wall of the Palace, and was actually built over a stone drain[1] which issued from the foot of the Palace wall. This small conduit, which must have originally carried off the surface waters of some little court in that region, was traced beneath the floors and walls of the first three magazines of the house, but it was already in disuse at the time when it was built, since its course was interrupted by the foot of a M. M. III *b* *pithos* in the second Magazine. This shows that, as in other cases, this private residence was constructed at a time when the adjoining Palace area was in ruins.

Like the above-mentioned 'North-West House', the 'South House', the 'House of the Chancel Screen', and others built in such aggressive con-

[1] The depth of the drain from the surface of the covering slabs was 37–40 cm. Its width was 34–5 cm. The sides were formed of two courses of flat stones and a well-mixed clay mortar filled the interstices of its bottom slabs.

tiguity, this 'North-East House' did not survive the initial phase (*a*) of the First Late Minoan Period, contrasting thus with the 'Royal Villa' which, as we have seen, like the little Palace well to the West, remained in occupation to the date of the final overthrow of the Palace itself.

Unfortunately, owing to the intrusion of other structures and the

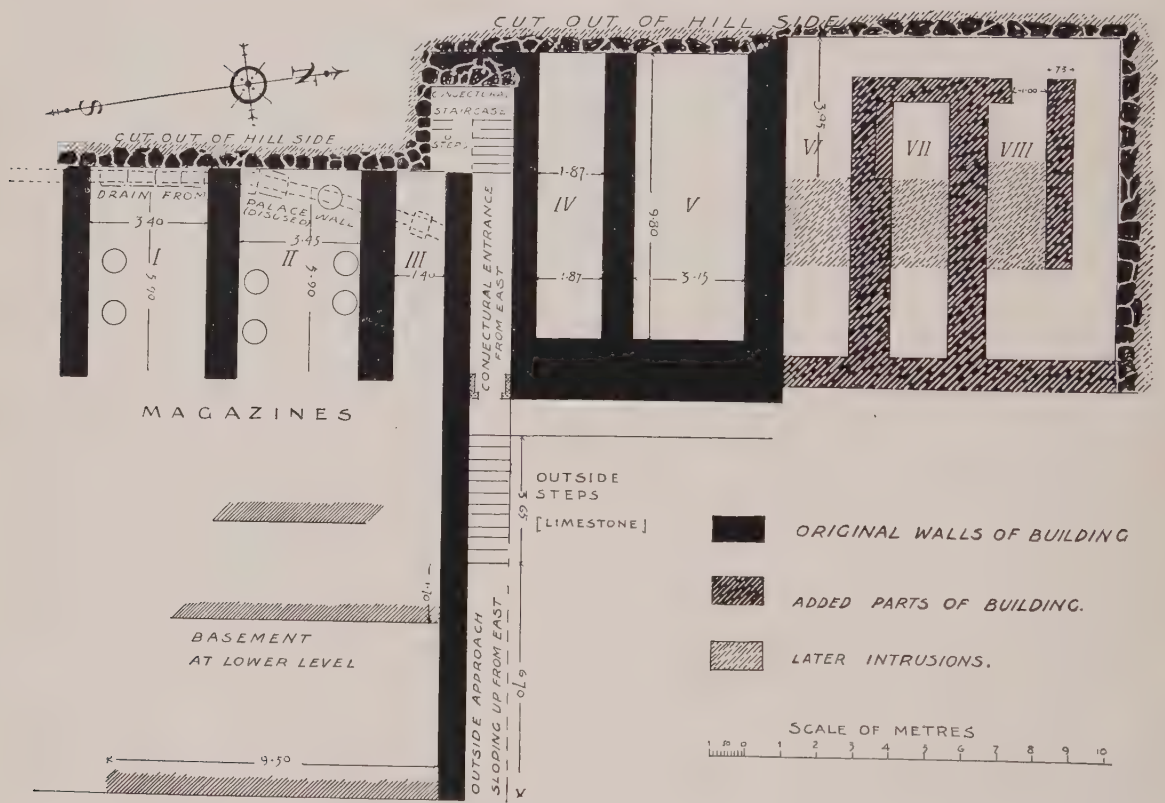


FIG. 240. BASEMENT PLAN OF NORTH-EAST HOUSE.

Ground-plan of 'N.E. House'.

denudation of the hill-side, it is impossible to recover the arrangement of the living-rooms of the house, though its basement plan is given in Fig. 240. The building, however, must have been of exceptional size since its remains extend approximately 33·50 metres from North to South and 25 from East to West—dimensions which considerably exceed those of any of the houses above described. From the well-cut ashlar masonry on the North face of Magazine VI this seems once to have been an exterior wall, so that the section North of this must be regarded as an afterthought. It must have been practically contemporary, however, with the rest of the building since the ceramic remains early and late on the floors of its

Magazines corresponded with those found in the Magazines South of it and repeat the same history.

The position, built into a slight cutting of the East slope of the hill, like the South-East House and others, is itself very characteristic of Minoan planning, since it secured, as in the other cases, the maximum protection from the heat of the sun and the fury of the prevailing winds. It was built on two terraces, and supplementary excavations undertaken in 1922 brought out a flight, apparently of twelve limestone steps, leading from the higher to the lower terrace and abutting below on a paved path with a slight incline to the East.

Upper and lower entrances.

From this latter feature and the fact that the steps were of limestone, it appears that this passage was open and represents an avenue of approach from the Kairatos valley below to the narrow corridor above, which forms a more or less central division of the part of the house that lay on the upper terrace. It ended, doubtless, in a staircase leading up to the living-rooms.

It looks as if there had been an entrance near the landing of the outer steps, opening into this central corridor. From this point a section of the façade on that side of the West wing of the building running North along the upper terrace level is better preserved. Its stylobate is of ashlar masonry with a good face. This upper façade is traceable, beyond a point where it slightly recedes, for another 10 metres.

Series of magazines.

Apart from the central passage, the interior spaces, of which we have evidence on both sides of it, were clearly magazines, and the whole existing plan must be regarded as referring to basements. A small flight of stairs would, as suggested above, have led up from these to the upper floor or living-rooms, but it is probable that the main entrance to the *piano nobile* was from the terrace-level behind, which, previous to the long denudation of the slope, of which there are many evidences, may well have risen to a considerably higher level.

M. M. III *b* *pithoi* on floors.

It is clear, as already noted, that, like a series of other private residences now built along the Palace borders, the 'North-East House' belongs to the same epoch of intensive building activity that followed on the great seismic destruction suffered on the site towards the close of the Third Middle Minoan Period. Its contents, moreover, have a special value, as corroborating the conclusion, already substantiated in the case of a series of other private houses and of the restored Palace itself, that the new structures come well within the limits of the M. M. III Period, as ceramically defined, and cannot properly—as was first supposed—be ascribed to L. M. I.

The evidence here, indeed, is quite as clear as in the case of the 'House

of the Chancel Screen'. The lower parts of a series of *pithoi* had remained in position on the floors of the Magazines, as is generally the case with large vessels of this kind—a good indication of the original date of the structure. But these belonged to two classes, both of them characteristic of the mature M. M. III Period, and showing that the house was built at a time when the ceramic types, such as we find them buried beneath the Earthquake deposit in the Palace, were still substantially preserved.

Remains of 'medallion' *pithoi*.

As in the restored West Magazines of the Palace itself[1] and in the 'House of the Chancel Screen',[2] there were here remains of 'medallion' *pithoi*, some of them *in situ*, showing traces of similar rosettes in white unfixed paint as those of the 'pre-seismic' Royal Magazines.

Fig. 241 a. Sherd showing Late Development of Ropework Ornament (M.M. III *b*).

Other M.M. III *pithoi* with conventional cord ornament.

Remains of numerous examples were also found, some of them in position, of a class of *pithos* very well represented in the large contemporary houses excavated by Dr. Hatzidakis at Tylissos, West of the Knossos district. These, which often show somewhat elongated proportions, very characteristic of M. M. III tradition, are distinguished from the earlier Middle Minoan class by a special treatment of their ropework decoration. According to the old technique, which goes very far back, the 'ropework' ornament had been pressed into relief by the thumbs. In place of this, some flat instrument, probably of wood or bone,[3] was now used, by which a succession of overlapping tongues of clay were produced (see Fig. 241 a).

Fragmentary remains of *pithoi* with this conventionalized ropework are abundant in the 'pre-seismic' M. M. III deposits of the Knossian Palace. The ornament was also transferred to smaller vessels, as is well illustrated by the sherd (Fig. 241 a) from the M. M. III *b* filling of the 'House of the Sacrificed Oxen'.[4] The *pithoi* of this class, of which the bases were found on the floors of the North-East House, were too incomplete to admit

[1] *P. of M.*, i, p. 562 seqq. and Fig. 409. Near the inner extremity of Magazine (5) and by the entrance of Magazine (10).

[2] See above, p. 396.

[3] Observation of Dr. Mackenzie.

[4] See above, p. 305.

of restoration, but their elongated type is well represented by the contemporary specimen (Fig. 241 B) from the North-East Magazines of the Palace. This specimen, indeed, is of particular interest since it belongs to an absolutely parallel stratum, having been found at a slightly higher level than the original M. M. III *b* floor of these Magazines. Good parallels are found at Tylissos.[1] The 'trickle' ornament, itself of very ancient derivation, is a feature of all this family of store-jars.

Similar jars from Palace, Tylissos, &c.

FIG. 241 B. M.M. III *b* *PITHOS* WITH CONVENTIONIZED CORD DECORATION, FROM KNOSSOS.

On the same floor, beside a *pithos* of the rope-work type here illustrated, there came to light in the Sixth Magazine the sealing (Fig. 242, *a*, *b*, *c*) formed of a thick nodule of clay and doubtless used for securing some valuable possession. It is inscribed on two sides with characters of the Linear Class A.[2] A new feature here is the sign after the 'facing head' on Fig. 242, *b*, which resembles a truncated lion's head and supplies an interesting parallel to the bull's heads similarly truncated, that

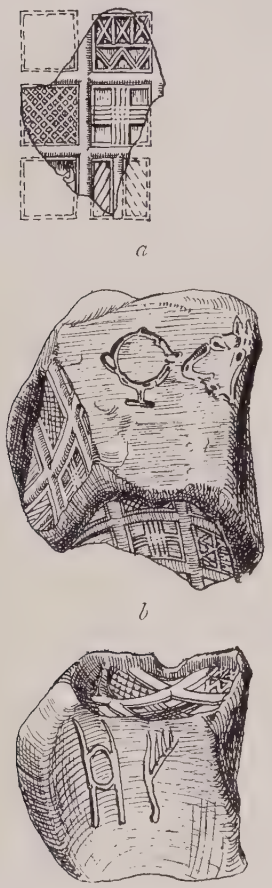
M.M. III seal-impression.

Discovery of inscribed clay sealing presenting lion's head 'rhyton'.

[1] Hatzidakis, Τύλισσος Μινωϊκή ('Εφ. 'Αρχ.).

[2] The second sign seen on Fig. 242, *c*, seems to be a variant of Type 12 *d*, of this class (see Comparative Table, *P. of M.*, i, p. 642). The preceding sign also occurs in Class B, but the simpler form here seen is more characteristic

appear, together with a 'Vapheio' cup, on a tablet of Class B,[1] and which must certainly be identified with 'rhytons' in precious metal similar to those presented by Cretan envoys to Egyptian Viziers. In this case the lion's head,



a

b

c

FIG. 242. CLAY SEALING INSCRIBED WITH CHARACTERS OF LINEAR CLASS A AND LION'S HEAD 'RHYTON'.

FIG. 243. GOLD LION'S HEAD 'RHYTON', FOURTH SHAFT GRAVE, MYCENAE.

Parallel with 'rhyton' from Mycenae Shaft Grave and Central Treasury of Palace at Knossos.

with the characteristic *barbiche*, recalls the magnificent example, executed in thick gold plate, from the Fourth Shaft Grave at Mycenae[2] (Fig. 243). A lion's head 'rhyton' based on an original in precious metal has now been restored from fragments found in the Central Palace Treasury at

of A (No. 34). The 'facing head', No. 1 of Fig. 242, *b* (cf. Table 14, *a*), is generally much elongated in Class B.

[1] See below, p 533, Fig. 336.

[2] Reproduced in its unrestored form, and described as 'a golden mask in form of a lion's head', by Schliemann, *Mycenae*, p. 211, Fig. 326. Stais, *Collection Mycénienne* (1909, p. 33, No. 273), figures it partly restored. It was first properly illustrated and rightly identified as a 'rhyton' by Professor G. Karo in his *Minoische Rhyta* (*Jahrb. d. d. Arch. Inst.*, xxvi, 1911, pp. 253, 254, and Pl. 19, from which Fig. 243 is taken). See, too, p. 826, below.

Knossos. A profile view of this, showing a similar *barbiche*, is given by anticipation in Fig. 545, p. 830, below.[1] Its date is probably L. M. II.

Seal-impressions with façade of 'building', typical of M.M. II.

The seal-impression, of which portions are seen on two sides of the clay nodule, is also of special interest since the intaglio from which they are taken belongs to a well-defined class, presenting the conventional façade of a building, which was much in vogue in the Third Middle Minoan Period.[2] A four-paned window, indeed, is seen in this design very like those that recur on the faïence 'House Tablets'. Part of a sealing of this class was found in one of the Temple Repositories,[3] and a whole row of disks on one of the 'medallion' *pithoi* of the Royal Magazines had been impressed with a seal of this kind.[4] It has been already suggested that the building may have been a summary representation of the Palace itself. The discovery of this sealing in a Magazine of the North-East House, as well as the occurrence of the remains of a series of 'medallion' *pithoi* such as were found in the Royal Magazines, certainly seems to bring this building into a palatial relation. It may, indeed, have served as a supplementary store-house, which would account for its exceptional size and its numerous Magazines. Its orientation exactly corresponds with that of the Palace.

Was building used for Palace Stores?

The lion's head 'rhyton' that we may believe to have been contained in some casket, of which we have here the broken sealing, was in that case a royal possession. The well-ascertained epoch of the signet-type at the same time demonstrates that the precious relic to which it refers belonged approximately to the same date as that from the Fourth Shaft Grave.

M.M. III *b* pottery.

A certain number of small vessels of the M. M. III *b* class also survived on the floors of these Magazines, including a 'hole-mouthed', bridge-spouted pot with a black wash, and cups of the Vapheio form, showing a dark glaze. There also occurred remains of a vase of the 'honey-pot' kind, resembling a jar with incurved mouth like those of the 'Temple Repositories', and one, with an inscription of the Linear Class A, found in a basement near the South-West Angle of the Palace.[5] The great bulk of the ceramic remains here brought out belonged to the initial phase, *a*, of L. M. I, showing that this house had been cut short at the same time as other houses of the epoch of restoration built in the immediate neighbourhood of the Palace, or even in some cases within its original boundaries.

But great bulk of L. M. I *a* including 'pithoid jar' type.

Of special interest among the L. M. I *a* pottery was the occurrence of

[1] In the Section (§ 67, p. 827 seqq.) dealing with the 'Central Palace Treasury'.

[2] See *P. of M.*, i, pp. 564, 565, and Fig. 411.

[3] *Ibid.*, p. 565, Fig. 411, *a*.

[4] *Ibid.*, p. 564, Fig. 410.

[5] See A. E., *Knossos*, *Report*, 1901, pp. 10, 11; cf. *P. of M.*, i, p. 616, Fig. 453.

a type of large jar, which it has for the first time been possible to restore an example, in Fig. 244.

In decoration and technique this jar is a characteristic specimen of the early L. M. I style. The designs are of a bright ruddy brown hue on the buff ground, and the details are added in the usual evanescent white. The olive sprays that run round some of the zones are also a recurrent motive of vases of this epoch, a reflection, as we shall see, of the naturalistic school of wall-painting that was so characteristic of the closing Middle Minoan phase.

Its handles reminiscent of 'medallion' *pithoi*.

But the arrangement of the handles on the jar, as restored in Fig. 244,[1] is specially significant. It is provided with three rows of upright loop handles, six in each, answering thus to the number of the zones and handles of the 'medallion' *pithoi*. The dotted rings enclosing white disks, here seen within the coils of the spiral, may be themselves, moreover, regarded as a reminiscence of the embossed disks of these larger jars with their white rosettes. The type of vessel here illustrated is of much smaller dimensions than the 'medallion' *pithoi*, being only 78 centimetres in height as compared with nearly a metre and a half, and the name of 'pithoid jar' may be conveniently applied to it.[2]

Preserves tradition of store-jars of earlier magazines.

It will be seen that both the 'medallion' *pithoi* and the type of 'pithoid' jar, above illustrated, correspond, in their successive tiers of zones with handles round, with the arrangement seen on the great store-jars of the Palace Magazines both at Knossos and Phaestos that go back to the earlier part of the Middle Minoan Age.[3] These great jars were built up in zones, and the ropework bordering each was suggested, as already pointed out, by the actual rope 'cradles' necessary for the transport of such unwieldy receptacles. The loop-handles that answer to these zones would thus have been utilized for the actual ropes. In the case of small jars, like Fig. 244, however, the handles served no utilitarian purpose.

Beside this, in Fig. 245, is placed a magnificent example of a 'pithoid' jar showing only two rows of handles, restored from fragments found near

[1] The lower zone with its handles and the base were wanting, but are here conjecturally supplied. This, however, may be regarded as a safe restoration, a zone of handles above the base being common to all varieties of *pithoi*.

[2] A good contemporary parallel to this is supplied by the fine painted jar with handles similarly arranged and a moulded rim from Pseira (Seager, p. 28, Fig. 9). Fragmentary remains of jars with similar moulded rim are not infrequent at Knossos.

[3] See *P. of M.*, i, pp. 232–4 and Figs. 174, 175. Some at least of these may be earlier than M.M. II, since large vessels of the kind are liable to go back to the same date as the floor on which they stand. The bosses on these *pithoi* are the progenitors of the later embossed 'medallions'.

Fig. 244. 'Pithoid' Jar with Three Tiers of Handles, North-East House, Knossos

Fig. 245. 'Pithoid' Jar with Two Tiers of Handles, from North-East House, Knossos.

Parallel class of 'pithoid jars' with two rows of handles. Originates in a primitive 'two-storied' class.

the other and belonging to the same L. M. I *a* phase. This form of vessel with only two rows of upright handles, one on the shoulder and the other a little way above the foot, can be shown to originate from a still more archaic type of painted store-jar already diffused throughout the Aegean world at an epoch corresponding with the latter part of the Early Minoan Age, and which itself finds illustration in a widespread primitive family of clay vessels of 'two-storied' construction (see Supplementary Note to this Section, p. 428).

A painted *pithos* from the Palace of Phaestos of somewhat later fabric, but standing in a very close decorative relation to early Cycladic and Helladic vessels of this class, is given in Fig. 250, *d*, p. 429, below. That intermediate types existed, also provided with two rows of handles similarly placed, is shown by an M. M. III burial-jar from Pachyammos.[1] The survival of the lower row of handles does not seem to be paralleled by any other funeral urns from that site, but it must be remembered that in the M. M. III *pithoi* with the conventional ropework described above (cf. Figs. 241 A, B), this arrangement is adopted in place of the more numerous rows of handles on the earlier 'corded' *pithoi* of the Palace Magazines. The Late Minoan *pithoi* follow the same arrangement, and the L. M. I *a* painted jar (Fig. 245) shows the pithoid type, with two rows of handles, applied to an 'amphora'.

But it is the 'pithoid' jar (Figs. 244 and 246, *a*) with the triple rows of handles that has left the clearest mark on the evolution of some of the finest of the painted amphoras belonging to the later phase (*b*) of L. M. I.

Handles derived from 'pithoid jars' seen on L. M. I *b* 'amphoras'.

The Minoan 'amphora' type itself, with four upright handles on its shoulder and none below, following the regular form of the M. M. III jars like those of Pachyammos, was already in use in the earliest L. M. I phase. But in the case of the later style (*b*) of that Period, associated with the marine motives and other contemporary designs, a series of amphoras makes its appearance with three or even four rows of handles, and clearly pointing to antecedent types of the 'pithoid' class shown in Fig. 244, above.

An outline sketch of specimens of these 'amphora' types is given in Fig. 246, *a* and *b*, taken from two of the fine vessels of this class found in the beehive tombs of Old Pylos (Kakovatos). It will be seen that the looped handles, of which there were respectively tiers of three and four on these vessels, show a graceful *diminuendo* as they descend from the shoulder. The lowest only survives in little more than a rudimentary form, and in the next stage the handles on the sides of the vase, which served no useful purpose and were a hindrance to the potter, have entirely disappeared, only those on the shoulders being preserved. Several of the 'amphoras' of the

These handles disappear before L. M. II.

[1] Seager, *The Cemetery of Pachyammos*, Pl. VIII (Grave XI *a*).

same series are of this simplified form, and in the next ceramic stage, L.M. II, that produced pottery of the mature 'Palace style' no single instance is recorded of an 'amphora' on which the side handles are preserved.

Bronze 'pithoid amphora' shown in Senmut's Tomb.

It is of great interest in connexion with these 'pithoid amphoras' to notice the appearance of a bronze or copper vessel, clearly a translation into metal of an allied ceramic type, in the hands of one of the Minoan envoys depicted in the Tomb of Senmut, the Grand Vizier and Architect of Queen Hatshepsut I (Fig. 247).[1] In his other hand he holds an inlaid silver cup of 'Vapheio' type.[2] It seems to me that there can be little doubt that the objects below the stellate ornaments between the upper row of handles are really to be taken as indications of a second row below the shoulders, as on our amphoras, though perhaps reduced to a mere rudimentary form. The outline of these, somewhat resembling an 8-shaped shield, conforms, indeed, to that of the base of the handles of Minoan *pithoi*. In the vessel here depicted we recognize something more than a general resemblance to the ancient class of Minoan store-jars. We see before

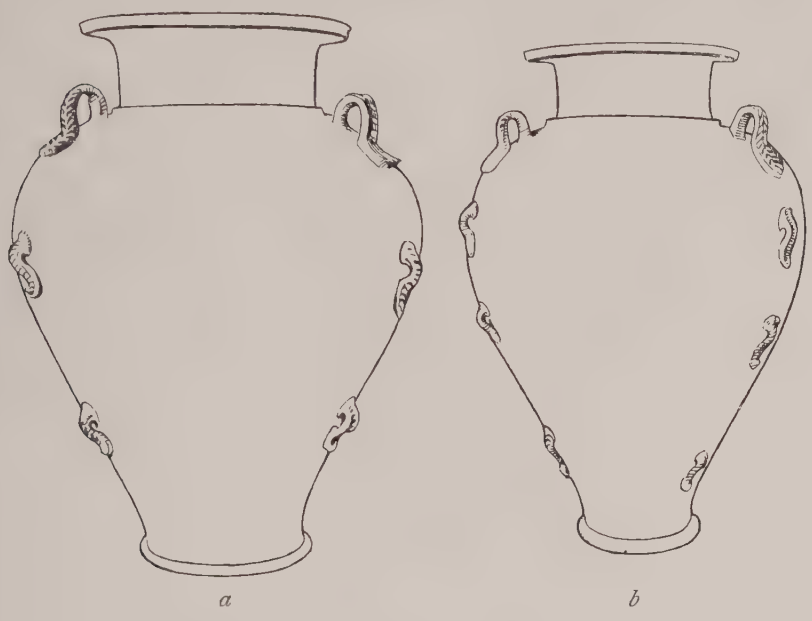


FIG. 246. OUTLINE SKETCH OF L. M. I *b* AMPHORAS OF THE 'PITHOID' CLASS FROM KAKOVATOS.

[1] The paintings of this tomb were first published by Prisse d'Avennes, *Histoire de l'Art Égyptienne*, Atlas II, Pl. VII, No. 2, &c. See, too, Steindorff, *Jahrb. des Arch. Inst.*, 1892, p. 14; H. R. Hall, from original notes, *B. S. A.*, x, pp. 173, 174, Figs. 4–8; and W. Max Müller (coloured sketches) in *Egyptological Researches* (1906), p. 12 seqq. and Pl. V seqq. Robert Hay's drawing of the tomb about 1837, published by Dr. Hall (*B. S. A.*, xvi, p. 254 seqq., Pl. XIV and Coloured Frontispiece), does not supply any new feature as regards this particular vessel. Fig. 247 is from the fine drawing of Mrs. N. de G. Davies (Metr. Mus. N.Y., *Eg. Exp.*, 1924–5, p. 43). For Senmut, see below, p. 736.

[2] See below, p. 737, Fig. 470.

us a vessel belonging to a particular stage of a well-marked series of 'pithoid amphoras'—L. M. I *a* rather than L. M. I *b*—translated into bronze-work.

The arrangement of triple and quadruple tiers of handles, as still preserved on the L. M. I *b* 'amphoras', itself supplies both a genealogical clue and an indication of the purpose that they served. Their derivation from the looped handles of the great 'corded' store-jars of the Palace Magazines carries their origin far back into the pre-history of Crete. At the same time, though of shrunken dimensions, we may perhaps infer that they served primarily for the storage of provisions. The olive sprays, on the one hand, and, amongst other sea-creatures, the octopods that appear already on the walls of earlier store-jars, may suggest some kind of *olla podrida* or of materials for *bouillabaisse*.

Fig. 247. 'Pithoid Amphora' of L. M. I Type translated into Bronze: Senmut Tomb, Thebes.

Knossos earliest centre of marine style seen on 'pithoid amphoras'. Specimen from Tylissos.

The form and style of specimens of this class of 'pithoid amphora' and the tradition embodied in the rudimentary handles may be thought to point to Knossos as their original source. From the fact that there seems to have been no general break in the local history there at the end of the First Late Minoan Period, as there was unquestionably in the Peloponnese, whole vessels in the fine L. M. I *b* style are yet to seek there. But the fragmentary remains show that the most perfect examples of the 'marine' and allied styles were executed by the Knossian potters. Their work, indeed, is in all probability illustrated by a beautiful L. M. I *b* pithoid amphora, from the neighbouring site of Tylissos, which is for the first time adequately shown in the restored drawing[1] reproduced in Fig. 248.

Beaded festoons and floral pendants from fresco figures.

It will be seen that in this case, in addition to the characteristic marine designs, which at Knossos have a far longer history than elsewhere, three of the zones are occupied by rows of conventional flowers depicted as if they were the pendants of necklaces of globular beads, and with festoons of smaller beads between. This motive is itself of great interest since it

[1] By Monsieur E. Gilliéron, fils.

illustrates the borrowing by the Minoan vase-painter of the ornamental adjuncts, depicted both in relief and in the flat, of human figures on the painted plaster friezes of the Palace walls. Necklaces and bracelets of globular beads, as well as strings of beads of a floral form, adorn 'the Ladies in Blue',[1] while festoons of similar beads form part of their *coiffure*. The 'Jewel Fresco', indeed, depicts the attachment of gold beads of the same kind to a lady's locks, though with pendants in this case in the shape of negroid heads.[2] The painted relief, again, of the Priest-King[3] shows a necklace of lilies linked by globular beads, a closely parallel illustration of which is further supplied by the border of a bronze bowl from the 'North-West Treasure House'.[4] Human subjects themselves were banned by the Minoan vase-painters, but their toilette adjuncts were admitted for their decorative value.

FIG. 248. 'PITHOID AMPHORA' (L. M. I *b*) FROM TYLISSOS SHOWING MARINE AND PENDANT MOTIVES.

Like the marine motives with which they were associated, the festoons and floral pendants seen on the zones of this L. M. I *b* 'amphora' were suggested by the painted designs already existing on the walls. The extent to which the

[1] *P. of M.*, i, p. 545, Fig. 397.

[2] *Op. cit.*, p. 526, Fig. 383. This relief was unfortunately entirely pulverized by the earthquake of June 26, 1926.

[3] See below, p. 774 seqq.

[4] See below, p. 779, Fig. 507, and compare the borders on the cover of this Volume.

M. M. III wall-paintings influenced the vase decoration of the early part of the Late Minoan Age is, however, best illustrated by the copious materials of naturalistic and other subjects afforded by the 'House of the Frescoes', to be described in the succeeding Section.

Note on the Origin of the Class of 'Two-Storied' Pots.

Attention has been called in the preceding Section to a recurring type of Minoan store-jars with two rows of handles, one round the shoulders and the other a little above the foot of the jar, which as the outline sketch (Fig. 249) shows, also survives to supply a Late Minoan 'amphora' form parallel to that of the 'pithoid' jars with three rows of handles.

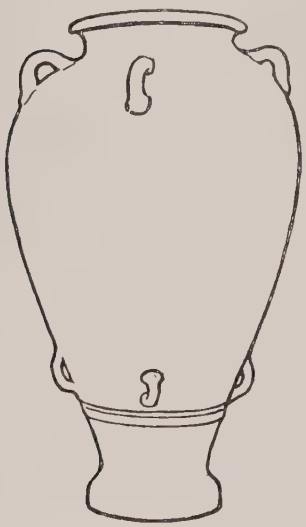


FIG. 249. OUTLINE SKETCH OF 'PITHOID AMPHORA' WITH UPPER AND LOWER ROW OF HANDLES.

The origin of this type of *pithos* must unquestionably be sought in the widespread primitive type of what may be called 'two-storied' vessels. In this ceramic class a form derived from a comparatively low, open basket, with ear-like handles attached to its margin, becomes the basis of a higher receptacle—the walls of what in effect resemble a second vessel, with or without handles above, being built up above its rim.

This method of ceramic growth, to be distinguished from the mere addition of a band or collar to the rim of a pot or of its simple doming over to imitate a gourd, is itself in one shape or another of very wide occurrence, and parallels may be found as far afield as New Mexico or the Mississippi Valley. Sometimes the upper pot has the appearance of having been put over the lower, as in the case of certain vessels belonging to the Second Style of Susa [1] and of the root-type of the painted cinerary urns of South-East Russia, which look like 'Villanova' pots set upside down.[2] But in the typical early Aegean form the upper member was evidently set into the lower. An early example of this is seen in the E. M. I pot from Vasilikì,[3] Fig. 250, *f*, the concentric semicircles of which, above the rim of the lower section, point, as in many analogous cases, to the imitation and reduplication of loop handles, such as are attached to the upper borders of baskets.

The indigenous pot from the Fifth Shaft Grave at Mycenae, Fig. 250, *e*,[4] is of special interest. On the one hand it represents, for Greece, a very late appearance for such a well-marked dual type. On the other hand, it shows a decided sympathy in form with certain two-storied types of the Italian Bronze Age, such as that from Crespellano near Bologna reproduced in Fig. 250, *g*. The comparatively low 'upper story' is foreign to the usual Aegean tradition, and the parallelism is in other ways so striking that some direct influence from the farther

[1] E. g. E. Pottier, *Délégation en Perse: Mémoires*, tom. xiii, Pl. XXXI and p. 144, and cf. p. 24, Fig. 117 from the Akropolis of Susa. These vessels belong to the period from Naram-Sin to Hammurabi.

[2] Compare, for instance, the examples in E. von Stern, *Die prämykenische Kultur in Süd Russland*, Pl. II, 1 and 3.

[3] See *P. of M.*, i, p. 61, Fig. 21. The lower part of this vase is wanting. In Boyd-Hawes, *Gournià*, Pl. XII, 13, it has been restored with a flat base.

[4] Schliemann, *Mycenae*, p. 331, Fig. 527. Compare the earlier Melian jar, *B. S. A.*, xvii, Pl. V, no. 65.

shores of the Adriatic may well be suspected. The bronze halberd blade from the Sixth Shaft Grave has indeed been already adduced as evidence of a commercial connexion with the Po Valley at this epoch.

This type also appears on North Italian sites such as Bismantova in a subdued, biconical shape. Farther removed again in date, but morphologically more primitive, the

FIG. 250. COMPARATIVE TABLE OF 'TWO-STORIED' POTS: *a–f*, GREECE; *g–k*, ITALY.

characteristic Villanova type of urn (Fig. 250, *i*, *k*) shows the building up process of these vessels even better than the far earlier examples from the Aegean side. In the class with which we are specially concerned, the upper story of the vessel is considerably higher and larger in dimensions than the open bowl or pan on which it is superposed. Both the separate pans with one or two handles and the jars, to which they provided a base and for which they often served

as lids, are found in Helladic deposits belonging to the beginning of the Middle Minoan Age[1] which stand in a close relation to a slightly earlier Melian class with lustrous paint.[2] These vessels were used as store-jars, but also largely for funereal purposes, as ossuaries. In all of them the record of the original lower bowl is preserved by the horizontal line and the handles on the level with its rim.[3] In the Helladic group, though not at Melos, the upper story was also provided with handles, and that this was also the Cretan tradition may be gathered from Fig. 250, *f*.

In the Aegean predilection for a high 'upper story', a good later parallel on the other side of the Adriatic is provided in the Villanova urns (see Fig. 250, *i*, *k*), to which reference has already been made. These belong to the latest Bronze and Early Iron Age, but the extension of the type East of the Adriatic makes it possible that there was an original geographical connexion with the Aegean World. This extension, indeed, points to a more fundamental relation than that suggested by the Mycenae pot, Fig. 250, *e*, the low upper story of which, as already observed, is contrary to the usual Aegean practice, and seems to be due to an intrusive influence.

[1] Tsountas, Ἐφ. Ἀρχ., 1895, Pl. X 1–7 (Aegina). Cf. S. Wide, vol. i, p. 346; W. Vollgraff, *Fouilles d'Argos* (*Bull. de Corr. Hell.*, 1906, p. 20 seqq.).

[2] C. C. Edgar, *Phylakopi*, p. 96 seqq. and Pl. VII; R.M. Dawkins and J. P. Droop, *B. S. A.*, xvii, Pls. IV, V and pp. 7, 9, where it is shown that such jars covered with shallow bowls (in this case handleless) were used as ossuaries.

[3] This particular Aegean class of two-storied pots with its high upper story superposed on wide-mouthed jars is to be distinguished from the still earlier class of the same kind in which an inward sloping collar is built up on a comparatively high bowl normally with four perforated handles—a type imitated in marble. (For examples see Tsountas, Κυκλαδικά (Ἐφ. Ἀρχ., 1898), Pl. IX, 1–6 and cf. Pl. X, 16 (marble).)

§ 52. The 'House of the Frescoes'.

Town area North-West of Palace—earlier and later group of houses; Exploration of 'House of the Frescoes'; Within zone of Greek and Roman Occupation; Entrance system of House and general plan; Stack of painted stucco fragments; Underlying stratum of 'Repositories' date; Room of painted Vases—Double-Axe decoration; Pottery M. M. III b *and L. M. I* a*; Votive Stone 'Ladle' and inscribed Libation Table; Recurring ritual formula and lion's head sign; Painted linear characters on fragments of wall plaster—their great size; Linear Type of Class A; Wall inscriptions probably of religious character; Painted stucco decoration preserved on walls of two lower rooms; The Fresco Deposit; Reconstitution of designs from stacked fragments; Wild natural scenes—rocks, flowers, and animal forms; Monkeys, copied from West African Green monkey derived through Egyptian medium; The monkey in the papyrus thicket; Parallel with desert belts on Egyptian paintings in Tomb of Kenamón; On which side was the indebtedness? Minoan suggestion in colour tone of Kenamón paintings; Minoan features in monkey panel; Treatment of rock-work—cut stones; Convention of rocks descending from above; Landscape with Blue Bird—a Roller; Wild roses and* Pancratium *lily; Crocus clumps mechanically repeated; Width and position of friezes—their frames; Fresco depicting* jet d'eau*—Minoan skill in hydrostatics; Discovery of conduit from spring of Mavrokolybo; Evidences of greater rainfall—change in flora; Artistic variations in details and colouring of flowers—the 'Sacral Ivy'; Marine types less common in 'House of the Frescoes'; The cultured home of a small burgher.*

Town area N.W. of Palace: groups of houses.

We turn once more to the course of discovery beyond the North-Western border of the Palace site. Between the West Court and the 'Royal Road', discovered at an early stage of the excavations, lay an unexplored region, which from its position would certainly have formed a centre of civic life.

Excavations undertaken in this area in 1923, supplemented by those of 1926, showed in fact that this, too, was thickly set with Minoan town houses. The upper stratum of these belonged, like those described in the previous Sections, to the beginning of the New Era, and to the great age of rebuilding that succeeded the Earthquake of M. M. III *b*. Beneath these, however, were remains of earlier houses, the last elements dating, as elsewhere, from the epoch that immediately preceded that great catastrophe.

These earlier remains, as was shown by results of the excavations of 1926, referred to above,[1] extended over the Western part of this area, and revealed a compact section of the early Town going back to the very beginning of the Middle Minoan Age. On this side, unfortunately, the traces of the later constructions had been mostly removed by the building activities of the Greek and Greco-Roman Age.

In the area East of this, however, more nearly approaching the West Court, this later stratum was better preserved. The excavations of 1923 here brought to light parts of the lower walls of four or five small private dwellings, and one of these, presenting remains of massive walling on its Western border, was singled out by me for special investigation.

Exploration of 'House of the Frescoes'.

The first results were hardly encouraging, since, immediately within the inner line of this wall, treasure-hunters—encouraged, we may suppose, by some finds of metal objects in the upper level—had grubbed right down below the house floors. But, whatever booty in the way of metal objects they may have hit upon, they had missed the greatest treasure that the house was ever likely to have contained—the stacked remains, namely, of the painted plaster wall-decoration that has given it its name.

The initial discouragement was not allowed to divert the course of excavation from this particular area, and the original hopes inspired by the remains proved to be more than justified. The complete plan of a house was here brought out, small, indeed, but which, from the remains of varied and artistic wall-paintings found literally stacked within it, throws a singular light on the culture of even the citizens of moderate means in the Minoan City at the opening of the New Era.

That the 'House of the Frescoes' should have contained such important remains is the more surprising when it is borne in mind that its extreme dimensions were no more than 17 metres by about $11\frac{1}{2}$, and the depth at which the basement floor-levels lay was only about three and a half metres beneath the surface of the ground. Moreover, the whole of the area in which it lies had been much disturbed and built over in the days of the Greek and Roman city. The Greco-Roman level went down to within three-quarters of a metre of the Minoan pavements. Geometric Greek sherds occurred below this, where parts of the Western and Northern walls had been pulled away. In two places the fabric had been cut into by wells of the Classical period,[2] and others were found near the outer borders of the house.

Within zone of Greek and Roman occupation.

[1] See p. 366 seqq.

[2] One had cut into the border of the Westernmost section; another of good masonry which had missed the walls came to light in exploring the S.E. corner of the small room in 1926.

Actually resting on the lower part of the walls of the middle section East was a large Roman oven, and in the immediately adjoining region one of the 'wager pits', by which the overlying earth was removed, struck a Roman burial cist containing an extended skeleton, apparently of a woman, and a tall amphora.

Very different had been the case of houses which, like several of those beyond the Palace borders on its farther side, had not only had the partial support of the hill-side, but had lain beyond the zone of invasion by the later occupants of the soil.

Entrance system of house.

Disturbances due to Greco-Roman building activity had specially affected the small projecting wing on the North side of the 'House of the Frescoes' that contained the entrance system. Its walls, however, where not preserved above the ground level, were traceable by means of their foundations, except for a slight gap where the actual doorway had been (see Plan, Fig. 251). The foundations and overlying limestone plinth of this little projecting wing stepped slightly up from South to North, and remains were visible of a line of gypsum blocks above the plinth.[1] Flanking the entrance lobby on the left, probably with a step up, was a small room, one gypsum door-jamb of which had been preserved in position, though the party wall had disappeared. This would have clearly been the door-keeper's room, and it contained two paving slabs of ironstone—*ἀμυγδαλόλιθος*—at two different levels, showing that the floor had been raised at some period. The lower of these—12 cm. below the other—was covered with red-faced stucco, representing the original floor decoration.

Door-keeper's room.

Interior plan.

On the right side, the entrance hall (A) at its farther end gave into the first of two passage rooms (K, J), and, immediately by its entrance, into an elongated space (C), apparently lit by a window in the North wall, which again communicates with another (D) to the South of it. Unfortunately, a large part of the interior area of these had been so much turned over by treasure-hunters that a detailed knowledge of its original arrangements is now impossible. From its elongated shape it may be suggested that C contained the staircase, indeed this conclusion is almost inevitable. It was in disturbed earth above the West section of D, about a metre above the floor-level, that there occurred two cult objects of great interest, described below, namely, the inscribed libation table and stone ladle.

In the narrow compartment, E, bordering D on the East, occurred the

[1] In the East wall of the house there is an intervening limestone course between the plinth and the gypsum blocks.

Stack of painted stucco fragments.

remarkable heap of painted stucco fragments that have given their name to this house (see Fig. 261, p. 445, below). A fringe of it extended over the

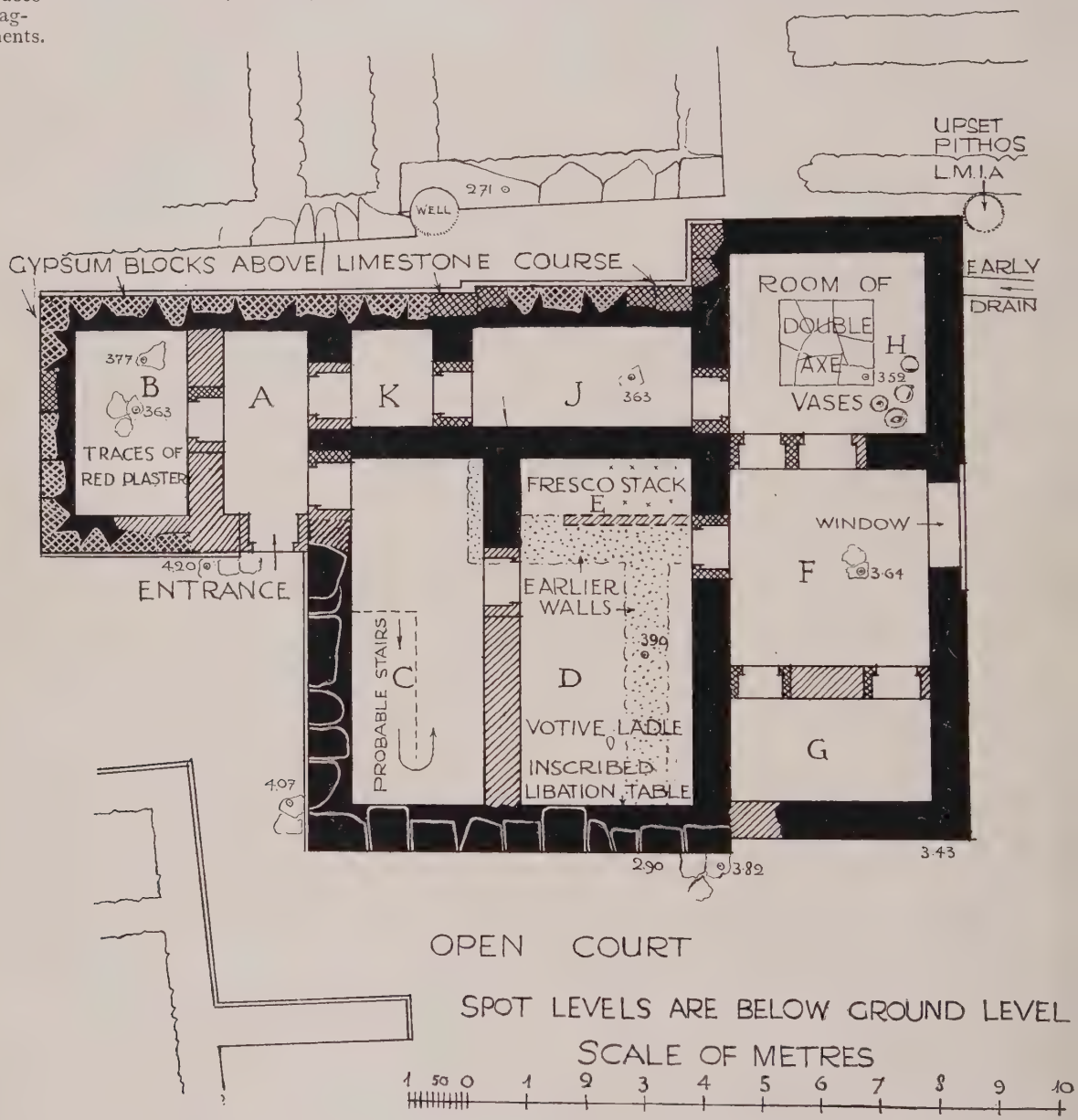


FIG. 251. PLAN OF 'HOUSE OF THE FRESCOES' (LOOKING EAST).

stump of the Southern wall of this space, but this protrusion had clearly succeeded on some subsequent removal or falling away of the upper part of the wall.

The enclosed space that contained the fresco heap seems to have been a kind of closet separated from the body of Room D by what must have been a thin partition of clay and stucco, such as is so often found in Minoan buildings, rather than by an actual wall. This partition, however, rested on the edge of a wall-line belonging to an earlier house, offshoots of which were also traced, running at right angles to it, in this part of the building. These remains were explored during the campaign of 1926, and the masses of pottery associated with them, and immediately underlying the floor-levels of the later house, proved to be of the same class as that of the 'Temple Repositories' and other contemporary deposits belonging to what may be called the 'earthquake stratum' of M. M. III *b*. There were a few late 'tortoise-shell ripple' sherds like those illustrated above,[1] but the approach to true polychromy was supplied by the clay tumbler (Fig. 252) showing dark veins on the light lilac ground, in imitation of banded stonework.

Underlying stratum of 'Repositories' date.

Fig. 252. Painted Clay 'Tumbler' imitating Veined Stone from Earlier Stratum, 'House of the Frescoes'.

The spaces D and E are flanked on the South by the room marked F, and a smaller (G), approached from it, so far as can be determined from the remains, by two doorways, with a wall-section between.[2] The room F, the walls of which presented plain painted plaster decoration of the same kind as that better illustrated in H, had a window opening by its S.E. corner. On the East side a double doorway gave entrance to a small, nearly square, room, the plaster floor of which showed a central rectangular pavement of ironstone slabs.

Room of painted vases.

On the floor-level of this room were the almost complete, though scattered, remains of the painted vessel (Figs. 253, E, and 254) showing dotted white and 'new red' decoration of the early part of L. M. I, and designs of Double Axes, which also occurred on a fragment of a cup found with it. In the S.W. corner, moreover, there stood intact a one-handled jug with spiral decoration of characteristic L. M. I *a* style, the form of which is directly taken from a bronze type, of which a specimen, found in the

Double-Axe decoration on jug and mug.

[1] P. 363, Fig. 202, *a*, *b*.

[2] The second door-jamb from the North side is one-sided, showing that it abutted on a wall. The wall itself had disappeared, but the jamb of the corresponding door South of it was found apparently in position, though the gypsum material had been much disintegrated. The fellow jamb on this side has been restored in the plan.

hoard on the South slope, is here illustrated for comparison in Fig. 253, F. It belongs to the transitional M. M. III–L. M. I phase. The painted vessels found on the floor of this room have a special interest in their bearing on the date at which the house ceased to be occupied. That its final ruin took

FIG. 253. A, B, C, D, E, PAINTED VESSELS FROM ROOM H, 'HOUSE OF THE FRESCOES'; F, BRONZE VESSEL FROM HOARD FOR COMPARISON.

place in the L. M. I *a* Period is further corroborated by the fact that pottery of that style was uniformly found in the disturbed earth above the floor-levels in various parts of the house. On the other hand the very early and transitional character of some of the fragments found in Room H was itself a noteworthy fact. Some of these belonged to a distinctly earlier phase than that represented by the mature L. M. I *a* jugs (Fig. 253, A, B) and other associated vessels. Among these fragments occurred that shown in Fig. 255, with black

Pottery M. M. III *b* and L. M. I *a*.

disks on a dark ground and a lighter pattern, the surface of which is decorated with punctuations, recalling the white strokes on the similar sub-triangular intervals in the decoration of the M. M. III *a* cup from the neighbouring town drain, illustrated in Fig. 204, above. Almost complete remains were also found of the little 'hole-spouted' vessel (Fig. 253, D) in a typical white

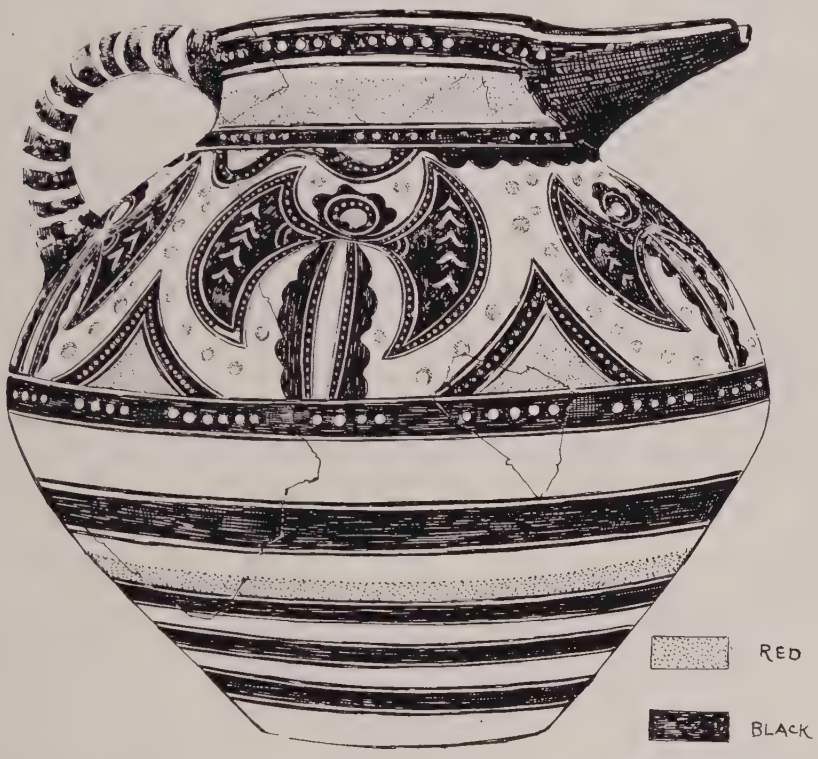


FIG. 254. JUG WITH DOUBLE-AXE MOTIVE REPEATED, L. M. I *a* ('HOUSE OF THE FRESCOES').

on dark style. It reproduced the motive of four axe-like spokes, radiating from a central ring, practically identical with that on a jar[1] from the Magazine bordering that of the 'Lily Vases' of M. M. III *b* date. The earliest ceramic element on the floors of this house is thus seen to go back within the borders of that Period. At a higher level, above the 'Room of the Vases', were remains of later structures, containing 'champagne cups' of the usual L. M. III *b* style. On the other hand, above the central part of the house, superposed on a disturbed stratum containing L. M. I *a* sherds, were fragments presenting marine designs of the concluding L. M. I phase (*b*) and pointing to some rebuilding about the middle of that Period.

[1] *P. of M.*, i, p. 583, Fig. 427*a*, and cf. p. 581, Fig. 425.

Votive stone 'ladle' and inscribed libation table.

Of the ritual character of the vessels with the Double-Axe motive found in Room H there can be no reasonable doubt. This religious element in the remains was supplemented by the discovery in the adjoining space, D, of a 'Votive Ladle' of grey limestone (Fig. 256, c) resembling those found within the peak sanctuary of Juktas and the inscribed specimen from Trullos.[1] Near this there also came to light a more important relic in the shape of a large part of a Libation Table, in finely banded limestone, Fig. 256, A, bearing on its two remaining faces an inscription in the Linear Script A[2] (Fig. 256, D). Eighteen signs are here shown, with marks of division into several groups.[3] The small 'feline head', No. 9, is of special interest, as it may refer to the Minoan Lion Goddess.[4]

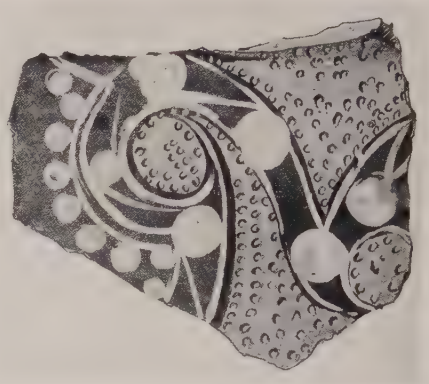
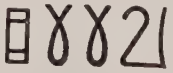


FIG. 255. TRANSITIONAL LIGHT ON DARK FRAGMENT. ROOM H, 'HOUSE OF FRESCOES'.

Recurring ritual formula and lion's head sign.

This conclusion greatly gains in probability from the fact that the sign-group of four characters preceding this corresponds with a recurring formula  that has been shown to mark a series of ritual objects, connected in two cases at least with important Minoan sanctuaries.[5] It is seen on the Libation Table from the Psychro Cave as well as on another, and on part of a steatite cup—doubtless as a mark of consecration—from

[1] *P. of M.*, i, pp. 623–5 and Figs. 461, 462.

[2] Signs nos. 4, 6, 7, 9, and the form of the penultimate 'hand' sign show that the series belongs to this earlier linear class (cf. Table, *ibid.*, i, p. 642, Fig. 476).

[3] There was also possibly a dot, indicative of such division, after sign 13. This sign is imperfectly preserved, but may have been no. 12 *b* of the Table cited.

[4] The facing lion's head, or mask, occurs already as a hieroglyphic character. A specimen with a fleur-de-lis crest is given under No. 74 in my *Scripta Minoa*, i, clearly of an ideographic nature. Since then I have noted its occurrence, without the crest, as an ordinary hieroglyphic sign on seal-stones, in one case repeated four times and filling a whole side of a bead-seal. It also, as shown in *P. of M.*, i, pp. 673, 674, and Fig. 492, is reproduced in successive degenerations on a class of 'talismanic' gems. It appears in the ordinary signary of the Linear Class A (see *ibid.*, i, p. 643; Comparative Table of Signs of the Hieroglyphic and Linear Script). In the Linear Class B it appears to be wanting.

[5] *P. of M.*, i, p. 629 seqq. The last sign of the group (see Comparative Table, *ibid.*, p. 642, Fig. 476) appears in a reversed position as on the cup fragment from Palaikastro (*ibid.*, p. 631, Fig. 469). This character seems to be confined to the Linear Class A.

Palaikastro, and again on the Trullos 'Ladle' that connects it with the cult of Juktas.

FIG. 256. A, B, PART OF INSCRIBED LIBATION TABLE IN BANDED LIMESTONE; C, VOTIVE LADLE OF GREY LIMESTONE; D, INSCRIBED CHARACTERS OF LINEAR CLASS A ON TWO SIDES OF LIBATION TABLE. 'HOUSE OF FRESCOES.'

The association, in the present instance, of the inscribed Libation Table with a votive 'ladle' of the same type supplies a new link of connexion between the local cult of Knossos and that of its Peak Sanctuary as well as with that of the legendary birth-cave of the 'Cretan Zeus'.

The preserved corner of the Libation Table (Fig. 256, B) was perforated. In its stepped shape it resembles a specimen from Petsofà, and a large fragment of one, finely executed in black steatite, found in the upper part of the Minoan stratum, about fifteen metres West of the 'House of the Frescoes'.

Painted signs on stucco fragments.

In connexion with this inscribed Libation Table it seems best to consider a remarkable discovery made among the fragments from the neigh-

FIG. 257. PAINTED INSCRIPTIONS, SEPIA ON ROSY OCHRE GROUND, ON FRAGMENTS OF WALL PLASTER FROM 'HOUSE OF FRESCOES ($\frac{1}{2}$).

bouring fresco stack, to be described below, of pieces of stucco wall-covering presenting painted signs of a linear class.

These may be arranged, according to the colour of the background and of the signs themselves, into two groups, A and B. In the first of these (Fig. 257, 1–6) the characters are of a sepia tint on a rosy ochre ground, and the pictorial conformation of the script is more strongly marked. The larger piece displays an upper border with a sepia band followed by slaty blue. The small piece, 10, the first design on which is possibly decorative, also shows part of a dark band above.[1] The height of the signs of this group ranges from 7·50 centimetres to about 3.

[1] One or two uncertain pieces, perhaps pictorial, are here omitted.

FIG. 258. LARGER PAINTED INSCRIPTIONS (CLASS B), BRIGHT ORANGE ON BUFF GROUND, ON FRAGMENTS OF WALL PLASTER FROM 'HOUSE OF FRESCOES' ($\frac{1}{2}$).

The other group B (Fig. 258), which shows a greater tendency towards linearization, presents characters of a brilliant orange hue on a pale buff

Characters of great size.

ground. Their height is considerably greater, one of them (A 2) being about 16 centimetres or somewhat over half a foot in height,[1] while the lowest is 13 cm.

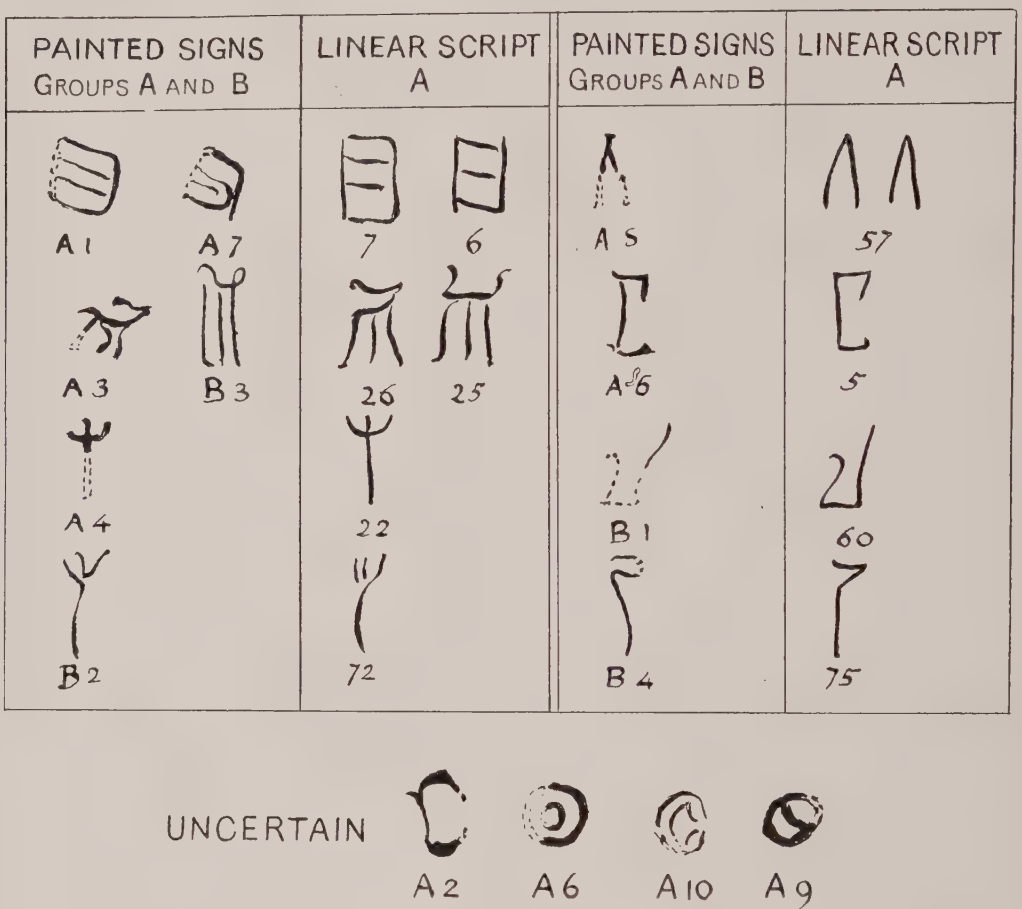


FIG. 259. PAINTED SIGNS OF GROUPS A AND B COMPARED WITH LINEAR CLASS A.

Compared with Linear Class A.

From the Comparative Fig. 259 [2] it will be seen that a series of forms found in the two groups shows a close correspondence with signs of the Linear Script. B 1, as with great probability completed, B 2, and A 8, moreover, are types that only occur in the earlier class, A, of the advanced Linear Script.

The painted fragments themselves stand apart from the other fresco

[1] The fragment on which this sign occurs is 26 cm. high and 24 cm. broad. In Fig. 258, 1, 2 the upper part and right side has been cut off.

[2] For a list of signs of Class A see *P. of M.*, i, p. 642, Fig. 476. Nos. 25, 26 seem to be variants of the same character, as also, perhaps, 6 and 7, but with specialized meanings. 57, 60, and 72 are characteristic forms of Class A.

remains found in the heap. These, with their friezes depicting natural scenery with rocks and flowers of brilliant hues, were almost certainly derived from the better lighted upper rooms of the house. On the other hand, it appears from the remains, described below, of the stucco covering of the walls of the ground-floor room where the vases were found that those of the lower apartments were tinted in a more sober manner. There seems to be a strong probability that these inscriptions had been painted on the otherwise plain walls of the adjacent room D and of its compartment, E, and had a definite cult purpose. These included the area in which occurred the inscribed libation table and ritual stone 'ladle'.

Wall inscriptions probably religious.

FIG. 260. PAINTED STUCCO DECORATION IN ROOM H, 'HOUSE OF FRESCOES'.

The painted inscriptions may well have been in the nature of religious invocations, talismanic formulas, or others equivalent to the texts on the walls of sacred buildings in later times. In a way they also served a certain decorative purpose, and the tall bright orange characters of Group B might almost suggest a comparison with the Arabic texts from the Koran that decorate the walls of early mosques.

Unlike the North end, the Southern section of the house showed no

Painted stucco decoration preserved on walls of two lower rooms.

signs of any later modifications, and the painted stucco decoration, of which considerable remains were preserved on the walls of this and the adjoining room West, may be taken to go back to the time of the original construction of the building. As seen in the S.W. Corner of Room H, this was executed in black, white, red, and ochreous brown, in the manner shown by Monsieur Gilliéron's sketch (Fig. 260). At the base of the wall, rising from the white stucco floor, was a black band 17 cm. high, delimited at top by a finely incised line; above this was a white field divided into three by narrow red bands (0·05 cm.), also showing incised guiding lines, and clearly intended to represent courses of masonry, each 12–13 centimetres high. Resting on this, at a height of 56 cm. from the floor, was the reproduction of a wooden beam about 5 cm. thick, with red graining on an ochreous yellow ground. Over this, again, between similar guiding lines, runs a white band with black veining 6 cm. broad, intended, according to the usual convention, to imitate the laminations of a surface of cut stone such as fine alabaster. Over this appears part of another white field, of which only about 15 cm. was preserved.

The imitation here, of structural arrangements and of the materials used, has a special interest, and the position of the painted woodwork probably represents that of the actual beam that would have run under the window in the adjoining room, F, where this plaster decoration was continued.

So close in several directions were the neighbouring houses that the lighting of the ground-floor rooms could never have been good, and we may infer that the wall decoration was throughout of the same simple kind as that illustrated above. On the other hand, apart from dado lines and cornices—these too at times presenting brilliant colours—the great mass of the fragments found in the fresco heap itself were of a highly decorative character, and we may reasonably conclude that they were derived from the upper rooms.

The Fresco Stack.

Stack of painted stucco fragments.

The deposit of painted stucco fragments was quite unique in character. They were literally stacked in the compartment E, East of the space D (Fig. 261). The pieces were mostly so thin and fragile that it was little short of a miracle that they should have been preserved at all. Their average thickness was about 4–6 millimetres,[1] without any rougher stucco backing, as if the

[1] A few had a thickness of 7 or 8 mm. One or two specimens ran to 1 cm., in one case with 2 cm. of mixed clay and stucco backing in two layers. The exceptionally large slab showing crocus clumps was 15 mm. thick. The size of this piece, 34 × 41 cm. (*c.* 13½ × 12 in.), exceeded that of any other found.

plaster had been laid directly on a clay surface. A few fragments were no more than 3 mm. thick. The mean width of the pieces as squared was, so far as could be calculated, about 23 cm. (*c.* 9 in.). Had they been simply flung down, such delicate slips would have been pulverized. It is therefore evident that the pieces must have been carefully removed, and piled in layers on the heap, with the face upwards or downwards, indifferently. A regular stack was thus formed, about 3·65 metres long (N. to S.) and 1·50 metres broad, sloping up towards the North, in which at one place I counted thirty-four distinct layers. Some of the fragments extended over the stump of the wall to the South, but this was probably due to the falling forward of the heap piled against it on that side, when the upper part of the rubble masonry had fallen away.

FIG. 261. STACK OF PAINTED PLASTER FRAGMENTS: 'HOUSE OF FRESCOES'.

Removal of fragments.

The removal of this mass of painted fragments was a long and arduous work, the separate pieces, often cracked into many smaller bits, being in each case first covered over by damp paper, on which a coating of plaster of Paris was then spread. The support afforded by this hard backing made it then possible to lift the pieces, whether the painted face lay upwards or downwards. Eighty-four trays (2 × 2 ft.) were finally filled with the frag-

ments, and the process of extraction and removal, mainly carried out by four expert workmen specially trained in this work,[1] took over five weeks.

Reconstitution of the designs.

For the grouping together and, where possible, actually joining the related pieces of the original fresco panels as well as for the necessary development of the designs, the services of Monsieur E. Gilliéron, fils, who kindly came over from Athens to assist me, were, as on former occasions, of inestimable value. The piecing together, indeed, which exercised our united ingenuity for a great part of another Season, might in some respects be compared with a 'jig-saw' puzzle on a large scale. That such a measure of success should finally have been achieved as to restore the essential parts of four panels, as well as to establish a series of minor reconstructions, was no doubt due to the fact that the fresco fragments had belonged to the decoration of one or two rooms of limited dimensions. The size of the largest room (D) of the ground floor of the house was not more than 4·70 metres by 2·80. The fragments formed part of a uniform system of dado bands, friezes, and corresponding cornices originally executed at the same time, in the same style, and by the same hands. No such results could be hoped from the great fresco heaps of the North-West Palace borders taken from a much larger area and representing various periods and styles as well as different structural contexts. In the case of the 'Miniature Frescoes', on the other hand, which were uniform in style, and found in the basements of what seems to have been a sanctuary of very limited dimensions, something similar was achieved.

The fragments from the 'House of the Frescoes', forming, as they do, a related series from a single small dwelling, bear a more or less uniform character, reflecting the individual taste of the owner in decorating his walls. Their scope, for this reason, is limited, and many contemporary branches of painted plaster decoration and various classes of subjects were not included in his selection. There are no reliefs, no large designs, apparently, such as would have covered the whole wall, and religious themes are avoided, nor are there even traces of the bull-grappling or other feats so dear to the Minoan artists. Scenes of the toilette are also wanting, and the choice of borders is itself confined to plain horizontal bands and lines in various colours.

Wild natural scenes.

The subject chosen for illustration may best be described as wild nature. Man is excluded, but animal forms such as monkeys and blue birds appear here and there, amidst a wilderness of grotesque rocks over-

[1] Georgios Lasithiotis, the discoverer of the first fragment of the 'inscribed' libation table from the Psychro Cave.

BLUE MONKEY IN ROCKY LANDSCAPE: 'SACRAL IVY' TO RIGHT

'House of the Frescoes'

(Restored drawing by E. Gilliéron, fils)

grown with flowers and creepers. An obvious parallelism can be observed, indeed, with the contemporary wall-paintings from the Little Palace at Hagia Triada, in which a cat is seen stalking a pheasant in a similar landscape, and with what appears to have been a similar design from the Palace at Knossos, of which we have only a fragmentary record.[1] Rocks, flowers, and animal forms.

Unfortunately, at Hagia Triada the surface of the wall-paintings had been much injured by fire, and the original bright colouring was much obscured in consequence. In the 'House of the Frescoes', on the other hand, it has been preserved in all its pristine brilliance. The number of flowering plants here depicted is also much greater, and it is not too much to say that we have before us the remains of the most vivid compositions that have come down to us from Minoan days.

FIG. 262. HEAD OF MONKEY FROM FRESCO PANEL.

Panels with Blue Monkeys.

On parts of two panels the foreparts of monkeys of a prevailing blue colour appear on a deep Venetian red ground, and it has been possible to restore a section of one of these panels in the Coloured Plate X. Most of the head of the monkey, together with a raised forepaw, is here visible, and the head of another from a similar panel is reproduced in Fig. 262. The animal is seen in a typical wild setting, where glorified papyrus sprays of many colours are mixed with native crocus tufts and dwarf iris, while the 'sacral ivy', to be described below, climbs up between the brilliantly veined and variegated crags. Monkeys copied from the West African 'green monkeys'.

On another panel of a paler complexion, showing an ochreous white field, the outline of the whole animal—here, of a lighter blue than the other—is to a great extent preserved (Fig. 264). He is seen prying among the papyrus stalks, which he divides with his paws, evidently on the hunt for something eatable, perhaps a waterfowl's egg. The papyrus here has not the floral character that it presents in the other panel.

[1] See *P. of M.*, i, p. 540, Fig. 392, A, B.

There can be no doubt that the animal here characterized is the usual long-tailed monkey of Egyptian wall-paintings, though the greenish hair-colour of these has been translated into blue by the Minoan artist. The species, indeed, may be recognized as the West African 'green monkey' (*Cercopithecus callitrichus*) with its fillet-like white band across the lower part of the forehead. In ancient Egypt itself it was originally an exotic animal, derived from the Soudan, but the monkeys of this species were familiar there as pets, being seen, for instance, under chairs, nibbling onions and frequently appearing as women's playthings, though also on men's tombs. Monkeys, as shown above,[1] already appear on Early Minoan seals, and were not improbably known as pets in the Knossian Palace, but they could not have been so familiar in Crete, and the Egyptian designs, as might have been expected, come nearer to Nature both in hue and in details.

Through Egyptian medium.

The panel reproduced in Fig. 264 presents, moreover, a curious feature. The space containing the animal is framed by a green and brown band of imitative rock-work that finds an interesting parallel in the similar encircling bands with figures of animals within, exemplified by some Egyptian wall-paintings.

The monkey in the papyrus thicket.

In the Tomb of Kenamón at Thebes, described by Mr. N. de Garis Davies, are remains of a hunting scene, in which figures of animals, such as a calf licking its hind foot, a hare beneath a bush, and part of a wild ass apparently browsing on a leafy branch of which a spray appears, are seen in separate compartments surrounded by desert belts of sand and shingle (see Fig. 263, *a*, *b*).[2]

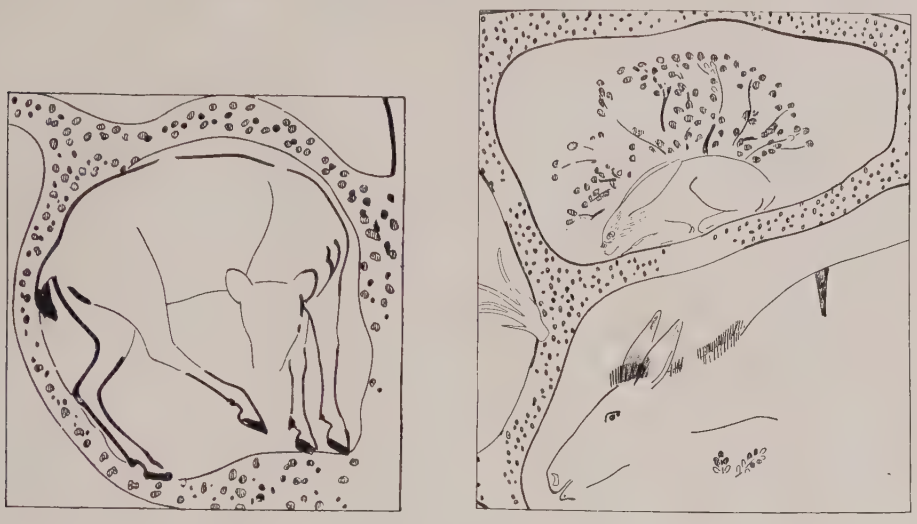
Parallel with desert belts on Egyptian painting in Tomb of Kenamón.

The analogies here with the Cretan work are so patent that an indebtedness on one side or the other must be admitted. It is true that these Egyptian designs are later in date than those of the 'House of the Frescoes' since they belong to the time of Amenhotep II, *c.* 1449–1423, whereas the Knossian wall-paintings go back *ex hypothesi* to a date not later than the middle of the sixteenth century B. C. On the other hand, the sandy desert belts depicted in the Theban tomb, and to which we see so close a parallel on our monkey panel (Fig. 264), clearly belong to Egypt.

[1] The ivory seal from Platanos, *P. of M.*, i, p. 118, Fig. 87, 1, is itself carved in the shape of an ape.

[2] *Egyptian Expedition of 1916–17* (work at Thebes of the Tytus Memorial Fund). In *N. Y. Metropolitan Museum Bulletin*, Pt. II, March, 1918, p. 22 seqq., and Figs. 31, 32. A full account will appear in Mr. Davies's *Tomb of Kenamón*. Fine copies of the wall-paintings by Mrs. N. de Garis Davies were exhibited in the South Kensington Museum. A photograph of the scene is published by Wreszinski, *Atlas zur altägyptischen Kulturgeschichte*, i, 65.

On which side was the indebtedness? That the animal figures of the Theban tomb were executed by a specially skilful Egyptian artist is most clearly shown by the remains of a design depicting an ibex brought to bay by a hound, and 'posed with tragic dignity, as if on its native crags'. On



a *b*

FIG. 263. ANIMALS SURROUNDED BY DESERT BELTS OF SAND AND SHINGLE: FROM TOMB OF KENAMÓN.

the other hand, not only does this method of thus isolating in encircling bands individual animals seem to be without a parallel in Egyptian Art,[1] but the background shows a yellow tone, in place of the customary violet, an exceptional circumstance, which Mr. Davies is led to account for by the use of a vivid yellow clay such as was affected by early Italian artists.[2] 'It

Minoan suggestion in colour tone of Kenamón paintings.

[1] Mr. Davies, *loc. cit.*, p. 21, thus describes these scenes: 'The artist had to depict a tract of desert crowded with game of various kinds, which has been browsing here on the spare clumps of bush. Nile gravel he depicts as pink or ruddy ground, dabbled with blue and red for its brown and grey pebbles.' Mr. Davies considers that 'as that colour would ill set off the figures, he has placed each animal or group in a detached island round which the desert runs, the hard outlines of the free spaces being relieved by planting vegetation round them, as if each beast had taken refuge in a patch of bush'. In the text I have preferred the view that the isolated spaces answer to hollows in the desert surface where naturally there would be more vegetation. The Minoan practice of encircling scenes with rock borders, from the edges of which plants spring, certainly supplies a close analogy. The plant springing from the pebbly border to the left of Fig. 263, *b*, may be compared with those of the fresco fragments (M. M. III *b*) from the lustral area of the South House (see above, p. 379, Fig. 211, *a* and *b*), and the bush behind the hare much resembles that of the 'Partridge Frieze' compared above with Cretan dittany (see above, pp. 111, 112, Figs. 50, 51).

[2] *Op. cit.*, pp. 22, 23.

might hint', he adds, 'that this da Vinci of Thebes came from a Northern School.' There was then only one 'Northern School'—that of Minoan Crete and its dependencies.

Yet Minoan features in monkey panel.

The Egyptian reaction on a scene like the present, showing a monkey in a papyrus thicket, must in any case be admitted. The Nilotic elements are there, but the adaptation is still Minoan. On some goldsmith's work that was also found in the Kenamón Tomb, monkeys of the usual Egyptian kind are seen in a more appropriate association climbing about Dôm palms, and in one case engaged in the congenial occupation of picking the fruit. They are certainly less in place in a papyrus thicket, and amongst reeds taken from a Cretan watercourse.

Indigenous elements, indeed, are introduced into this design—witness the reeds and a clump of blue crocuses—but so different is the style as a whole from the remains of the other panels, showing monkeys and birds against a background of rocks and flowers, that it seems possible that it should be regarded as the work of a somewhat later restoration. In any case, however, as the latest ceramic elements of the house demonstrate, it cannot be later than L. M. I *a*. Still, compared with the other panels, it gives the impression of a certain intensification of New Empire Egyptian influences.

The section of the panel, reconstituted in the Coloured Plate X, showing the forepart of another 'blue' monkey and the rest of the design of rocks and flowers against a deep Venetian red background, has such a brilliant decorative effect as would kill the other picture if placed beside it. The papyrus itself shows much more vividly coloured blooms, and the connexions supplied by a series of fragments include a wealth of brightly veined and variegated rock-work.

Rock Landscapes.

Treatment of rock-work.

The well-defined character of the striations and cores of the grotesquely outlined rock-work in this and other compositions, and of the flowering plants that spring from it, supplies a much more material setting than the little more than symbolic background of the contemporary 'Partridge Frieze', illustrated above,[1] though certain plant forms, such as the myrtle sprays that appear in the latter case, are identical in style. The egg-like pebbles of the frieze—derived, we may suppose, from cut conglomerate—with their cross striations, are also paralleled by similar examples on fragments from the present deposit. These banded pebbles are a very persistent feature in Minoan Art, which

Cut stones.

[1] P. 110 seqq., and especially p. 114.

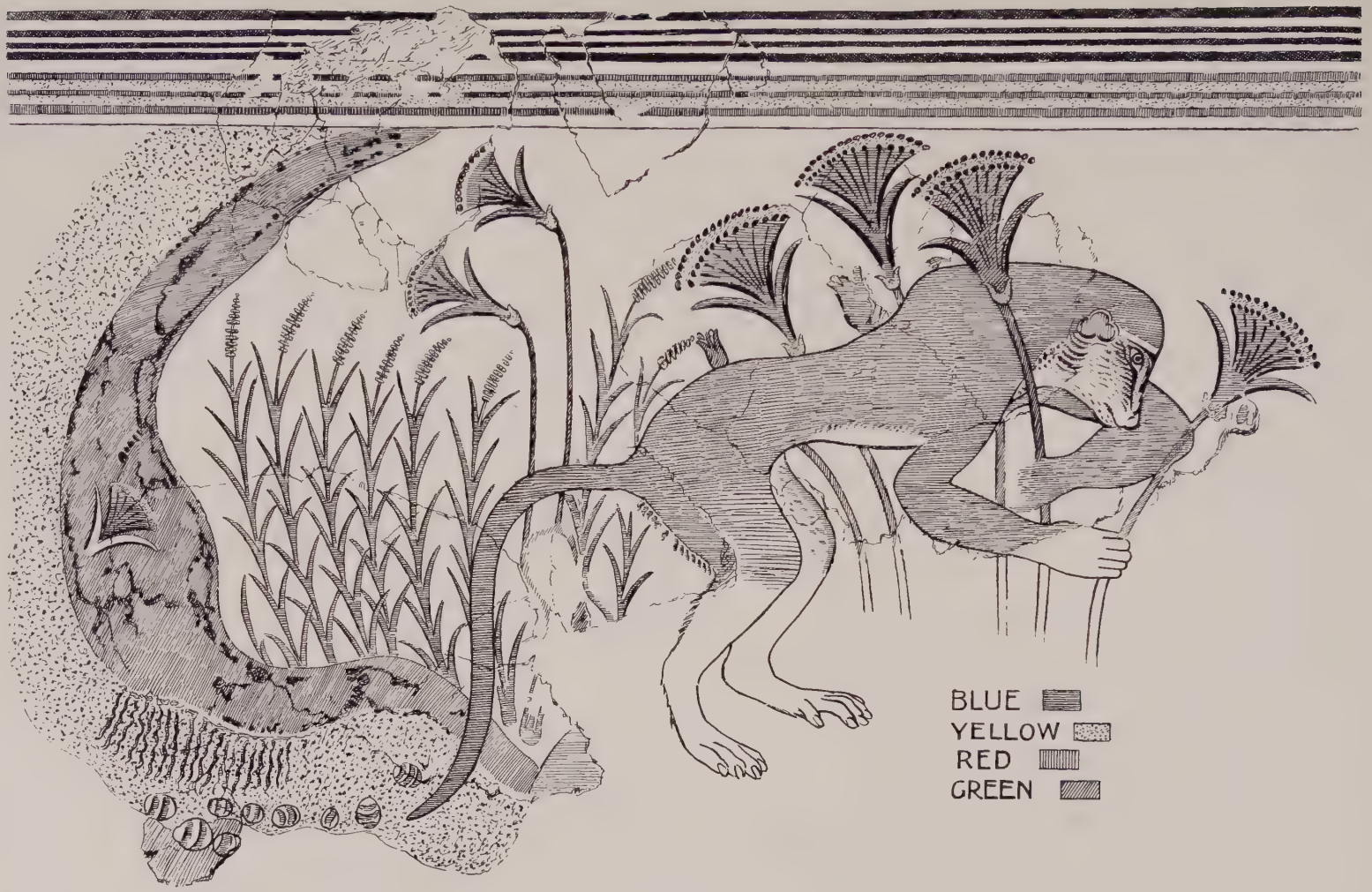


FIG. 264. FRESCO PAINTING OF MONKEY HUNTING AMONG PAPYRUS STALKS.

was taken over at Mycenae[1] and elsewhere in Mainland Greece. Throughout we see the same decorative device—originating, it may be supposed, in a very ancient acquaintance with intarsia work—of depicting the face of the stone as if cut in section, which is also so characteristic of Minoan painted borders. Many of the rocks here present the appearance of brilliantly veined agate or of artificially coloured onyx, sliced and polished.

The white edging of veins and coloured patches visible in the rock-work has already been noted in the case of ceramic imitations of stone-ware, going back, some of them, to the first Middle Minoan Period,[2] and is itself a natural feature, due to chemical action, in the markings of rocks like breccia. The attempt of the potters of the early part of the Middle Minoan Age to copy the brilliant veining of the stone vessels, so much in vogue in the preceding epoch, seems to have directly reacted on the pictorial methods of those who somewhat later on attempted to reproduce rocky landscapes on the walls. We already see this in 'Saffron-gatherer' Fresco.

Rocks descending from above across frame.

A striking feature is the manner in which, in this and other cases, the rocks are made to descend from above, and even, as here, are drawn across part of the actual frame of the panel. This method of the old Cretan artists may certainly be described as born of the soil itself and due to the constant need, in this rugged landscape, of depicting mountain glens. This way of showing in inverted fashion the farther boundary of a rocky valley, well known in the minor Arts from the time of the discovery of the Vapheio Cups, is now seen to depend on a traditional school of Minoan painting. The Vapheio examples may be taken, indeed, as an indication that this method was adopted in the larger prototypes of that composition in painted stucco relief, of the existence of which we have evidence in the remains found in the North Entrance passage of the Palace at Knossos, not to speak of the more fragmentary relics of such subjects going well back to within the limits of M. M. II. In painting on the flat we have also an early specimen of this in the 'Saffron-gatherer' Fresco.[3]

Later conventionalizations of descending rocks.

Often the rock outlines have become rounded off and conventionalized, such as we see them above the figure of the Cup-bearer in the Processional Series, and, still farther removed from the original form, in the Partridge Frieze. Stylized versions also appear in contemporary engrailed metal-work, as, for instance, above the lion hunt on the Mycenae dagger,[4] which

[1] Compare, for instance, *B. S. A.*, xxiv, Pl. X, fresco fragments from the 'Ramp House'.

[2] *P. of M.*, i, pp. 177, 178 and compare the 'birds' nest' breccia lid, Fig. 127, *a*, and the polychrome imitations *b* and *c*.

[3] *Ibid.*, i, p. 265.

[4] *Ibid.*, p. 715, Fig. 538.

approach in form to that of the Cup-bearer Fresco. On the counterpart of this, the inlaid dagger-blade of Queen Aah-hotep,[1] showing a lion pursuing a bull at a headlong gallop, a similar rocky border appears above with a speckled inner space recalling a not infrequent ceramic method of indicating granulated materials. This feature in the engrailed work, as well as the 'flying gallop' there depicted,[2] supplies a clear indication of the influence of Minoan Art on Egypt in the first quarter of the seventeenth century B. C.

Imitated on Queen Aah-hotep's dagger.

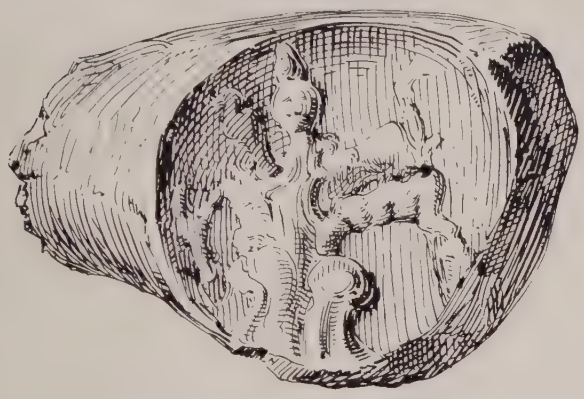


FIG. 265. GROTESQUE ROCKS (M. M. II *b* SEAL-IMPRESSION, KNOSSOS). ($\frac{4}{1}$)

Rock borders, as we have seen, are also commonly associated with marine pieces, as in the case of the faïence composition from the Temple Repository, which includes the flying-fish[3] and the pictorial panel with a similar subject from Phylakopi.[4] On an M. M. II gem impression, from the Hieroglyphic Deposit of the Palace at Knossos, we already see a fish and octopus in a pool surrounded by similar rock-work.[5] The passion for rock scenery at that epoch was, indeed, so great that on another impression (Fig. 265) from the same Deposit[6] the design simply seems to represent a grotto with overhanging crags and rocky pinnacles, but with no other visible adjunct, the portrayal of Nature for Nature's sake being sufficient for the artist. It looks as if it might have been intended to depict a sea-tunnelled arch like that in the cliff of Trypetì on the site of the harbour town of Knossos itself. A third sealing[7] shows a couchant roe beside a stream, beyond which rises a rocky steep with triple summits, the peaks in this case not descending from the upper border but forming a natural horizon.

Artistic passion of Minoans for rock scenery.

Though not so abundant as those of the terrestrial class, remains of rock-work designs associated with marine forms, recalling the relief work of the latter half of the Middle Minoan Age, also occurred in the fresco heap. These

[1] *P. of M.*, i, Fig. 537.

[2] *Ibid.*, i, p. 713 seqq. (see S. Reinach, *Rev. Arch.*, 1900–1).

[3] *Ibid.*, i, p. 520, Fig. 379.

[4] *Ibid.*, p. 541, Fig. 393 (*Excavations at Phylakopi*, Pl. III).

[5] *Ibid.*, p. 273, Fig. 202, *b*.

[6] From a drawing by Monsieur E. Gilliéron, père. See, too, *ibid.*, Fig. 202, *c*.

[7] *Ibid.*, i, p. 273, Fig. 202, *a*.

will find illustration below, where they are shown to supply an interesting link with the 'marine style' in ceramic decoration which characterizes the later phase of L. M. I.

Panel with Blue Bird (Roller).

Landscape with Blue Bird.

The composition reconstructed in the Coloured Plate XI may be regarded as well ascertained in its main features, though there are here and there some small lacunas.[1] The height of the panel, as here shown, is 60 centimetres or about two feet, but the lily sprays which seem to belong to it in the right corner would indicate some additional extension below. The upper margin is also incomplete, and the overarching rock-work probably continued above the creamy white field.

The central feature here is a blue bird, with red spots on its breast, rising from behind a rock as if in the act of spreading its wings. The head of the bird is here restored from another perfect example, belonging to a bird on a section of the same composition with a red ground. The bird

A Roller.

itself seems to be a Roller (*Coracias garrulus*), common in the Mediterranean regions and known in Crete, though not now apparently common there at the present day.[2] The greenish blue colour of the head, neck, breast, and wing borders and the somewhat hooked beak are sufficiently reproduced, but the speckling of the breast does not seem to be warranted. This bird has received its name from the curious somersaults and antics performed by it in the breeding season.

From the rocks spring wild peas or vetches—the pods shown simultaneously with spiky flowers—clumps of what seem to be dwarf Cretan irises, blue fringed with orange, and—for variety's sake—rose edged

Wild roses.

with deep purplish green. To the left, for the first time in Ancient Art, appears a wild rose bush, partly against a deep red and partly against a white background, and other coiling sprays of the same plant hang down from a rock-work arch above. The flowers are of a golden rose colour with orange centres dotted with deep red. The artist has given the flowers six petals instead of five, and has reduced the leaves to groups of three, like those of a strawberry (see, too, Fig. 266, A 1, A 2).

[1] In supplying indications of the connexion of the pieces, the exceptionally smooth surface of this series, as well as the texture and thickness of the fragments, supplied additional guidance.

[2] A. Trevor-Battye, F.Z.S., notes of this bird (*Camping in Crete*, p. 262): 'Seen on two occasions only, the second of which was June the 30th'.

BLUE BIRD (ROLLER) RISING FROM ROCKS WITH WILD ROSES, PANCRATIUM LILIES, AND OTHER FLOWERS

'House of the Frescoes'

(*Restored drawing by E. Gilliéron, fils*)

Facing p. 454

Fig. 266. Floral Types from the 'House of the Frescoes'.

Pancratium lily.

There can be little doubt that the white liliaceous flower (Fig. 268) springing up in the right-hand corner, below, is the Pancratium lily, which grows in Crete, as in many Mediterranean countries, on the sandy sea-shore. The plant, as literally drawn by Sibthorp, is shown in Fig. 267, and it

Fig. 267. Pancratium Lily (from Sibthorp, *Flora Graeca*).

clearly appears from the simplified profile view (Fig. 269) that two-horned prominences of its inner corolla have, in the Minoan version, suggested stamens with forked terminations, the true anthers being left in the air. This may give a good idea of the liberties taken with natural forms in these decorative pieces.

Brilliant decorative effect of these stylized compositions.

It must none the less be allowed that the details of such a wall-painting as that shown in the Coloured Plate XI, with the Minoan 'Blue bird' and the many-hued rock and flowering plants, have a beauty of their own, in spite of their stylized character. The composition as a whole—the reserve afforded by the white field, the balance of tone and colouring, and the contrast of the rugged outlines of the landscape with the flowing

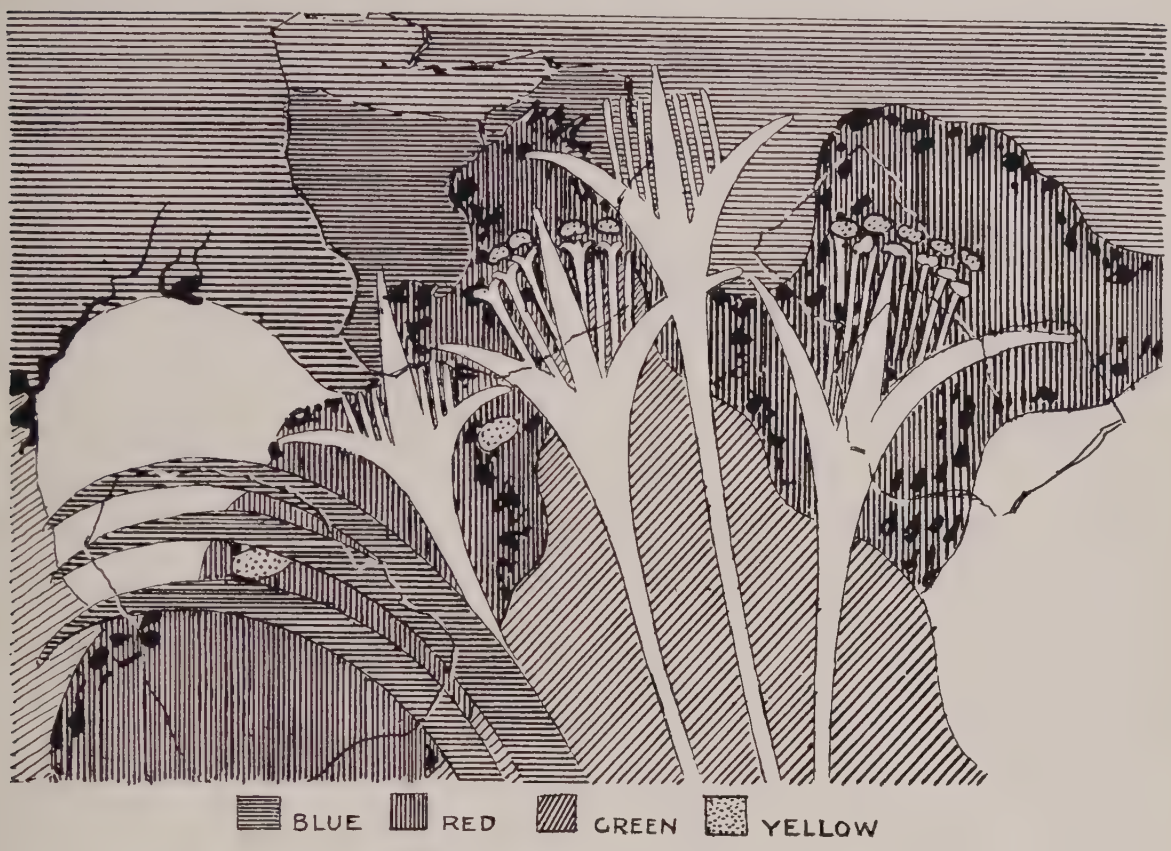


FIG. 268. PANCRATIUM LILY.

FIG. 269. SIMPLIFIED PROFILE VIEW OF FLOWER OF PANCRATIUM LILY.

lines of the trailing plants—breathes a true artistic spirit.

Young myrtle shoots.

A section of a simply designed frieze with shoots of young myrtle, clearly characterized by their rosy stems, rising from the ground is partly restored in Fig. 270. These have a special interest from the fact that they supply a close parallel both in form and colouring to similar sprays seen on the 'Partridge Frieze',[1] the decorative details of which are in many respects so divergent from those of the present group.

A more mechanical style of wall decoration, suggestive, indeed, of a modern wall-paper, is represented by the

[1] See above, Coloured Plate VIII, Frontispiece of Vol. ii, Pt. i.

Crocus clumps artificially repeated.

exceptionally large fragment[1] illustrated in Fig. 271. Here, beneath a black, blue, and white border, clumps of rose-coloured crocuses are, in heraldic parlance, *semé* on an orange field. This is bordered below by a waving band, alternately black, blue, and white, beneath which is a white field, whereon, as we

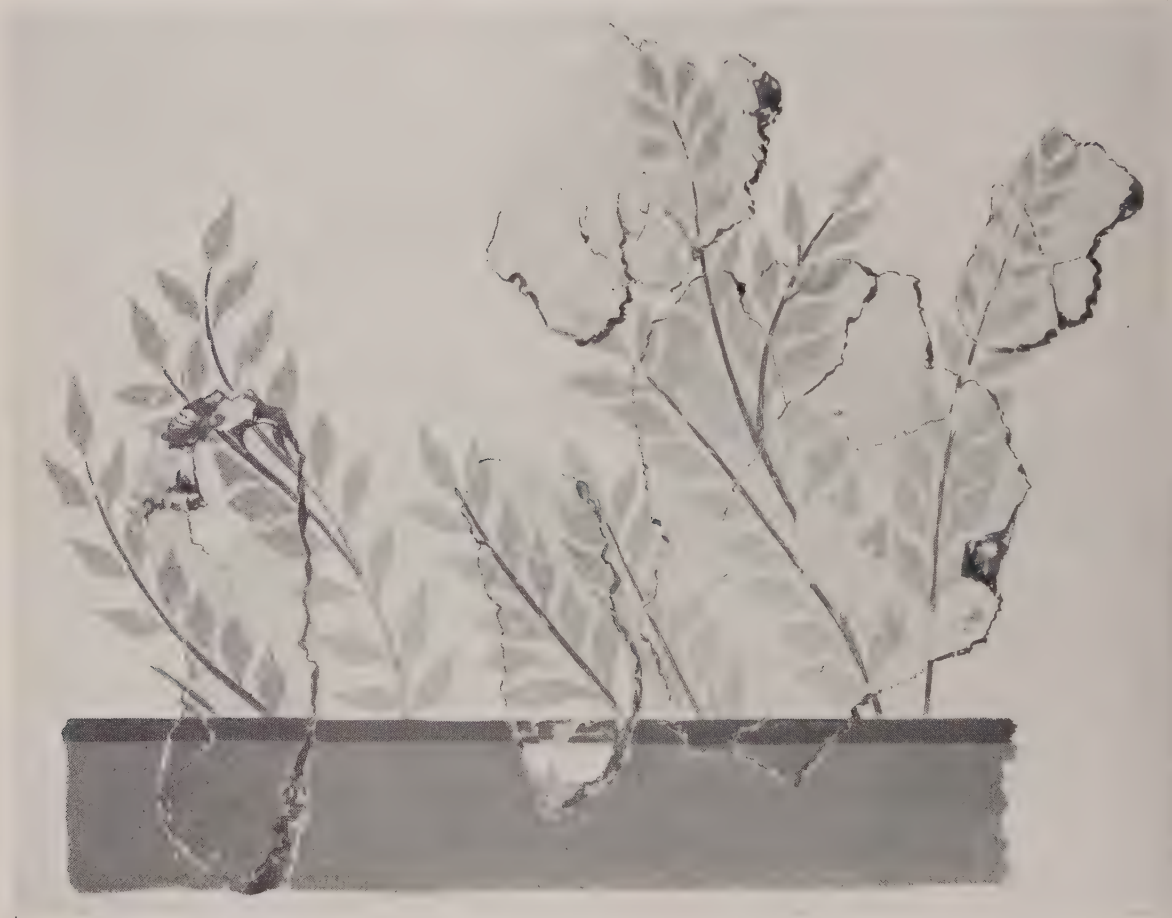


FIG. 270. MYRTLE SHOOTS RISING FROM GROUND.

learn from other fragments, blue-coloured crocuses are arranged in the same formal way. A careful comparison of the different clumps shows such an amount of conformity in the arrangement of the leaves and flowers as to lead to the conclusion that the repetition of the designs was aided in some artificial manner. There are indications that the white band was bordered in turn

[1] The dimensions of this fragment are 41 cm. broad by 34 cm. high. It was of exceptional thickness.

below by a conventional outline of rocky ground of a deep red colour, showing tufts of yellow crocuses. As nearly as it is possible to calculate, this fresco band, with a similar painted cornice below, would have been about a metre in height.

FIG. 271. FORMAL WALL DECORATION WITH CROCUS CLUMPS MECHANICALLY REPEATED.

Width and position of fresco friezes.

In the case of the other more naturalistic scenes with flowers and rock-work described above it is difficult to ascertain the exact width of the painted frieze. The width of the analogous composition at Hagia Triada, which seems to have been about 80 centimetres, may, however, serve as an approximate guide.

Position and Width of Fresco Friezes.

The position of fresco friezes in the Minoan houses was naturally dependent on that of the beams that formed the continuation, on the one hand, of the lintel of the doorway and the upper line of the window frame, and on the other of the sill or lower line of the window casing. In the case of the Stepped Pavilion of the 'Caravanserai', where there were no windows but a system of painted pillars of the same height as the door-posts, the Partridge Frieze was set in the interval between the ceiling and beams that formed the imposts of the doors and surrounding pillars—at a height, that is, of about 2·5 metres—and was therefore somewhat 'skied'. But the marks of wooden beams, seen in several cases immediately above the upper borders of the present group of frescoes, as well as the evidence of a greater width, show that these were placed under the lintel line. If the measurements prevalent in the rooms here were approximately the same as that of the 'Caravanserai' pavilion, the upper border of the painted friezes would have been about 1·80 metres up, and we may suppose that a dado strip filled the interval of about a metre below. These fresco designs would therefore have been well 'on the line'. It seems probable that, as at Hagia Triada, the dado band below consisted of painted plaster at this epoch, often coloured black, rather than of gypsum slabs.

Character of frames.

Of the frames themselves, which suggest copies in the flat of plaster cornices, there were a large number of fragments, though their exact breadth was generally indeterminate. They consisted of coloured bands and lines, black, blue, red, yellow, and white, often very numerous. In B of the Suppl. Pl. XX, where some typical examples are given, as many as nineteen lines and bands are traceable.

A Minoan Fountain.

Fresco depicting *jet d'eau*.

Perhaps the most remarked of all the fragments from the fresco heap are those reproduced in what seems to be their original relation in Fig. 272. Although the actual summit was not found, the object here depicted in the upper part of the field is clearly some kind of fountain or *jet d'eau*. The fragment below, with the same forked base and falling drops, seems, moreover, to be the base of another column of water drawn in a similar conventional manner, with a small section of undulating ground contour showing a wavy band, in this case, appearing beneath it.

The background here is white, the central column of water and the falling drops on either side a deep blue, while the drops descending in front of the main jet are rendered visible by being painted in white. The spout of

FIG. 272. *JET D'EAU* AND FRAGMENT OF ANOTHER, 'HOUSE OF THE FRESCOES'.

water itself is made, as already noted, to rise from a forked base. To the right is what seems to have been a rock boulder, and it looks as if the fountain had been introduced in connexion with natural scenery like that illustrated by other scenes of this group.

There are no geysers in Crete nor sulphurous ebullitions like those of Palici in Sicily, and it is impossible therefore that these were copied from any natural fountains to be found in the Island. We have here to deal with artificial *jets d'eau* of a kind that might, indeed, have spouted from some Pompeian basin, but which, down to Hellenistic times at least, seem to have been quite unknown to Classical antiquity. Such fountains were entirely foreign to Ancient Egypt or Mesopotamia.

Minoan skill in hydrostatics.

Yet in Minoan Crete, where every thing connected with the flow of water had been practically con-

sidered from the earliest times and abstruse hydrostatic problems empirically solved, the appearance of an artificial fountain should hardly excite surprise. Already, in the elaborate system of water-supply of the earliest Age of the Palace, advantage had been taken of the natural law by which water finds its own level, and water-pipes had been devised that anticipate the devices

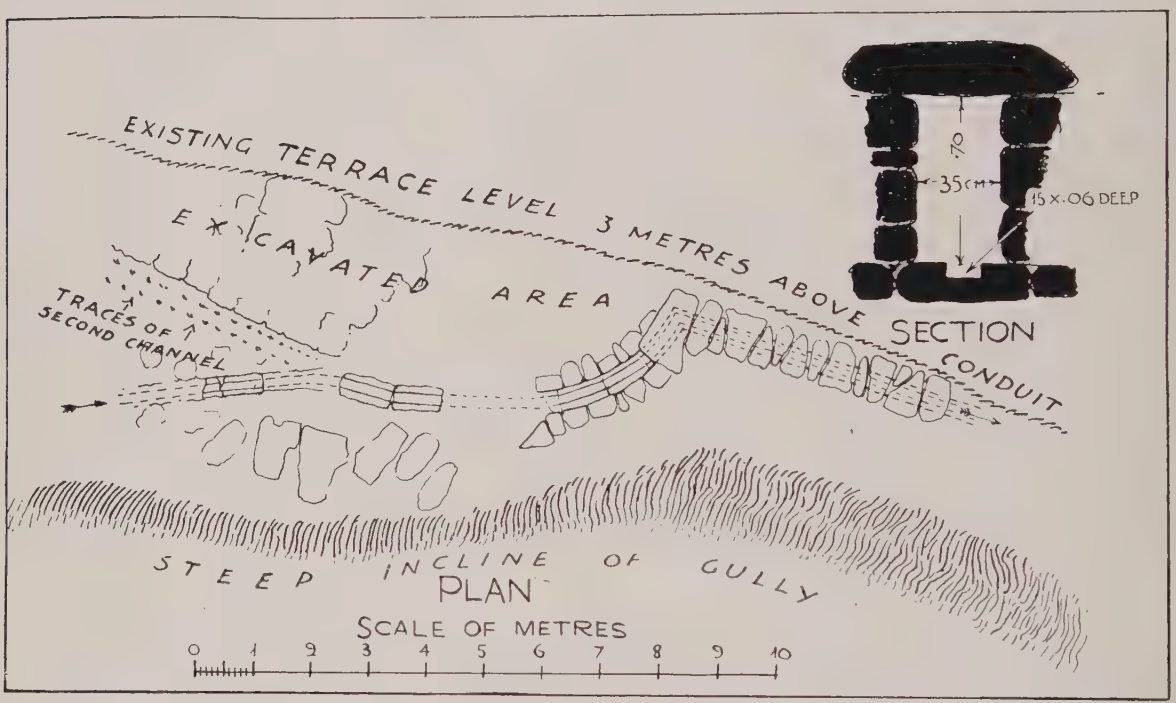


FIG. 273. PLAN OF SECTION OF MINOAN CONDUIT NEAR THE MAVROKOLYBO SOURCE, WEST OF KNOSSOS.

of modern engineering. At the beginning of the New Era, to which the 'House of the Frescoes' owed its construction, such a refinement of hydrostatic science, as the use of parabolic curves for water-channels, is repeatedly illustrated among the remains of the Palace.[1] It has been noted with regard to the foot-washing basin of the Caravanserai that its constructor positively revelled in the use of pipes for supply—with subsidiary distribution, for overflow, as well as for evacuation and drainage.

Evidences of greater rainfall in Minoan Crete.

Some direct evidence that there was a greater rainfall in Middle Minoan Crete than there is at present was afforded by a discovery made during the campaign of 1926 on the edge of a ravine about half a mile West of the site of Knossos, which forms the upper continuation of the gully through which the Vlychià torrent runs. At this point recent winter

[1] See Vol. iii.

rains had brought out some Minoan blocks, which an exploratory dig showed to have been the side-supports of a water-channel, fed by two branches and leading from a point some 50 metres beyond, immediately beneath which lies a source of very good water, known from the dark pool that it forms as Mavrokolybo. The spring is at present weak, and its water is conveyed by a single small pipe for purposes of irrigation.

Discovery of conduit from spring of Mavrokolybo.

A plan of the small section explored of the Minoan water-course by Mr. Piet de Jong is given in Fig. 273. It will be seen that the stone conduit, which was roofed over by slabs, follows a curiously winding course along the edge of the gully. It heads, however, towards Knossos, and was no doubt one of the sources of water-supply. It had, indeed, a particular value since it represents the nearest spring of quite pure water, issuing, as it does, from a limestone bed and free from the infusion of gypsum which mars the nearer sources. This spring has a special reputation owing to its purity, and in cases of illness water is taken hence to patients in villages some miles distant. The Minoan water-channel shows not only that there was a greater flow than at present, but that the earlier spring must have been several metres higher up than the present source—a sign of greater saturation of the soil.

Evidences of Greater Rainfall supplied by Flora.

Plant forms indicative of more humid climate.

The occurrence of certain species of plants, not now found in the neighbourhood, amongst those depicted on the walls points to the same conclusion that there was a more humid climate in Minoan times. Forest belts, securing a more equable and, probably, greater precipitation[1] and a larger amount of surface soil in which moisture could be retained, may well have existed even in the immediate neighbourhood of Knossos down to the close at least of the Middle Minoan Age. The exceptional building activity of this epoch, as well as the increase in shipping caused by expanding trade, involved a continual drain on the timber supplies, and in the course of the succeeding Late Minoan Age the greater distribution of population itself marks the clearing of old forest areas.

Causes of deforestation of Minoan Crete.

Some of the most beautiful egg-shell cups of the Early Palace seem to owe their suggestion to the calix of a native water-lily[2] with more or less rounded petals, resembling those of our common varieties, but unlike the

[1] In Cyprus a marked increase in rainfall has followed on recent afforestation there.

[2] See *P. of M.*, i, p. 241, Fig. 181. The suggestion of an Egyptian lotus motive may be admitted, but Mr. G. Claridge Druce, F.L.S., the well-known botanist, considers that the decorative form 'may have been suggested by the White Water-lily'.

Wild rose no longer found near Knossos.

pointed form of the lotus petals. Water-lilies, both white and yellow, are still known in Mainland Greece—but where do they grow now in Crete? The wild roses, climbing over the rocks in the wall-painting before us, were no doubt a familiar feature of the environs in Minoan days. At present they have wholly disappeared from the district, and their nearest habitat seems to be the well-watered Speliotissa glen in the hills fifteen miles away, where white roses are found. The Madonna lily, which, from its frequent recurrence in painted designs seems to have abounded here, is no longer to be found near the site of Knossos in a wild state.[1] The pale yellow violets—of which both the flowers and leaves are clearly indicated on a fresco fragment from Hagia Triada (Fig. 274)—have shrunken away from that site to distant mountain glens.[2]

Retreat of violet.

FIG. 274. VIOLETS ON H. TRIADA FRESCO (*VIOLA FRAGRANS*).

Selections of plant designs from the 'House of the Frescoes' are given in Figs. 266, 275. Sometimes, as in the case of the crocus (Fig. 266, B) and of the Madonna lily (Fig. 266, C), the reproduction is literal enough, though, as shown above, the transformation of the Pancratium (Fig. 268) is considerable. In the case of the rose we have noted such obvious discrepancies as the six petals and trefoil leaves. Free choice in colouring is continually manifesting itself, especially in the case of the crocuses, alternately shown white, blue, pink, and orange, and of the flower identified with the dwarf *Iris Cretica* (Fig. 275, F, G), which is depicted blue with a yellow fringe, pink with dark purple, and red bordered with green. The serrated leaves seen in Fig. 275, D, which hardly admit of identification, are sometimes blue and sometimes yellow on the same stalk. Fig. 275, A, from its leaves and flowers, which, however, resemble conventional rosettes, might be taken to be a convolvulus, but its buds are bell-shaped. By it appears a section of conglomerate rock with banded egg-like pebbles. Fig. 275, H, with its dark brown and orange petals, seems to be a honeysuckle. Fig. 275, I, is clearly a section of some flowering rush. The half-opened flower

Variations in details and colour of flowers depicted.

[1] It may, however, have been cultivated in the courts and gardens.

[2] The yellow violet (*Viola fragrans*), which the artist had probably chosen as his model, is still found high up on the Eastern flank of Ida and the Nida basin. It is here of a whitish hue, but colour counts for little in these designs. See A. Trevor-Battye, *Camping in Crete*, pp. 124 and 276.

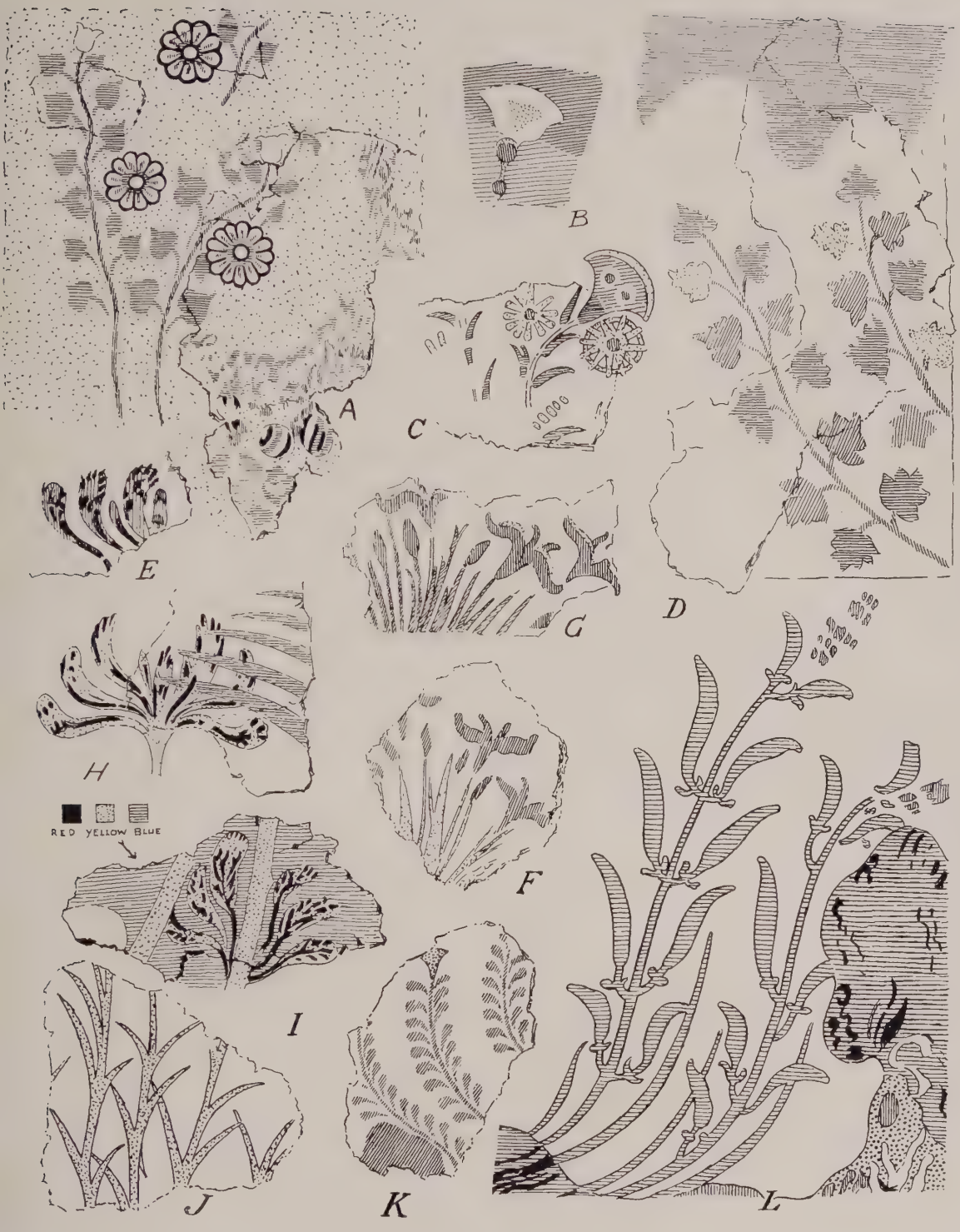


FIG. 275. VARIOUS PLANTS AND FLOWERS ON PAINTED STUCCO FRAGMENTS, 'HOUSE OF THE FRESCOES'.

with an orange patch (Fig. 275, B) somewhat suggests a *Cistus* or rock-rose, a class of plant abundant on the rocky Cretan hills, from which laudanum was still collected in Tournefort's time by flicking the bushes with whips.[1]

The sacral ivy.

Flowers suggested by papyrus sprays appear on reed-like plants (Fig. 275, C), which are otherwise hybridized by the attachment of a facing calix with stellate radiations. But the most interesting exemplification of a composite vegetable form is supplied by the trailing ivy seen between the rocks on the Coloured Plate X. This, as is shown below, is in its origin a blending of the sacred papyrus wand or *waz* of Egypt with its decorative canopy, and is finally assimilated with the ivy to such an extent as to bear its flowers. This 'sacral ivy', as we shall see, became the source of a whole series of ceramic types.

Marine subjects less frequent.

Considering the extensive vogue of marine subjects in reliefs of various materials, as well as in wall-paintings on the flat that is reflected by other remains of the last Middle Minoan Period, the comparative scarcity of such in the 'House of the Frescoes' is remarkable. This, indeed, is all the more strange since the ceramic imitation of these types in the advanced L. M. I phase (*b*) points to their continual popularity in the greater Art at the beginning of the New Era. Painted fragments, indeed, showing rock-work associated with marine forms, were not wanting in the present case, but from their comparative scarcity it has been thought better to group them with other evidence of the influence of this field of design on ceramic motives in the succeeding Section.[2] The individual taste of the owner of the 'House of the Frescoes' happened to turn rather to the flowery meads and creeper-hung rocks of his native country-side.

The Cultured Home of a Small Burgher.

High level of culture in small burgher class here illustrated.

No discovery as yet made in the Island illustrates in an equal degree with the 'House of the Frescoes', not only the high standard of civilized life in the great days of Minoan Crete, but the wide diffusion of culture among all classes. The house itself was quite a small one, its lower story being only of about 120 square metres in its dimensions (about 183 square yards) or not more than about a third of the South House, for instance. Yet the citizen, we may suppose, of the petty burgher class who had his habitation here is shown by the remains that have come down to us—a mere fraction of the whole—to have been a man of cultivated taste. The painted

[1] *Voyage into the Levant*, i, p. 79. Trevor-Battye, *Camping in Crete*, p. 275, enumerates several varieties of *Cistus*, amongst which *Cistus Creticus* is that which yields laudanum.

[2] See below, p. 469 seqq.

decoration of the walls is unrivalled of its kind for its picturesque setting, and the many-coloured effect is enhanced, not only by the varied choice of flowers, but by the convention of the rocks cut like agates to show their brilliant veins. At the same time, amidst all these elements culled from the native 'banks and braes', we may trace a certain susceptibility to influence, due to the revived connexions with Egypt, in the embellished papyrus clumps, here introduced, and in particular the appearance among them of the 'Green Monkey' of the Soudan. The painted clay pottery brought to light exemplifies the elegance of the vessels used for domestic and religious purposes, though methodical plundering has deprived us of the metal objects. Of great significance, moreover, was not only the discovery of the finely inscribed libation table, but the remains of painted inscriptions —some of them in large characters—on the walls. We have here good evidence that the owner of the house was well acquainted with the art of writing.

§ 53. Influence of Natural and other Designs of M. M. III Wall-paintings on Late Minoan Ceramic Decoration.

Artistic continuity unbroken by Catastrophe; Middle Minoan tradition of wall-painting maintained in restored buildings; Reflection of floral types on walls upon L. M. I a *pottery; Madonna Lily type; Olive sprays; imitated at Tell-el-Amarna; Papyrus, symptom of renewed intimacy with Egypt; Dependence of L. M. I ceramic types of papyrus on frescoes; The 'Sacral Ivy' motive—its appearance on wall-paintings; Origin from canopied papyrus wand* (waz)*—M. M. III examples; Sacral Ivy spray springs from Minoan 'Tree of the World' on Ring of Nestor; Comparison with 'Golden Bough'; It forms a character of Minoan scripts; Cypriote* Vo*?; 'Sacral Ivy-leaf' on L. M. I vases; Ivy-leaf naturally reproduced; Its divergent stalks derived from geometrical pattern; The 'Ogival Canopy' motive—outgrowth of 'Sacral Ivy'; Palm-Tree motive; Triple group on M. M. II vase; Survival of pictorial tradition of group of three date-palms on L. M. I* b *vases and on gold mouthpiece, from Old Paphos (L. M. III* a*); Grass-like excrescences of later types traced to inflorescence of date-palm; Late Mainland degenerations; Sea-pieces and ceramic imitations; Fully developed at Knossos in M. M. II* b*—Seal-impression and fine relief on steatite 'rhyton'; Marine reliefs taken over in repoussé work—Bronze Minoan amphora from Cyprus and golden bowl from Midea; Metal reliefs also influence vases in marine style—'Marseilles ewer'—from Egypt—probably of Knossian fabric; Knossos a centre of L. M. I* b *vases in this style; Marine ceramic style also existent before close of L. M. I* a*; Its progressive degeneration—break up of composite designs; L. M. III stage.*

Natural designs of Frescoes key to L.M. vase paintings.

The varied plant designs in their naturalistic setting of which the stucco fragments of the 'House of the Frescoes' have supplied such an extraordinary revelation—standing as they do for a much greater volume of similar designs that have been lost to us—throw a new light on whole classes of vase decoration that distinguish the ensuing Late Minoan Age.

Artistic continuity unbroken by catastrophe.

In the wall-paintings these natural subjects had already had a long history. Attention has been called to the fact that the artistic industry of the time immediately preceding the great overthrow, of which we have so many evidences, continued practically unchanged in the works of the succeeding restoration. The fresco painters, like the potters and other artisans, proceeded on the old lines, and it was not till a somewhat later date that a style

that could be distinctively called Late Minoan evolved itself. Even if we had not the earlier example of a rocky landscape decked with flowers, supplied by the 'Saffron-gatherer' Fresco, the proof that the wall-paintings before us really represent an unbroken Middle Minoan tradition, is to be found in a series of floral types, taken from similar scenes, that already appear on M. M. III pottery and other materials before the date of the great catastrophe.

M.M. tradition of wall-painting maintained in restored buildings

Vetches or wild peas like Fig. 275, L, white on a dark ground, occur on typical M. M. III pottery.[1] A plant on a jug from the Temple Repositories, compared above with a tulip,[2] turns out to be a literal copy of a vegetable form, repeated in a somewhat summary manner on a number of fragments from the 'House of the Frescoes', but best exemplified in faïence reproductions found in the Temple Repositories. These show pointed oval fruits springing from between the broad variegated leaves and, on the frescoes, alternately painted red and blue. On another jug from the same M. M. III deposit white grasses like Fig. 275, J, are set on the dark ground, a feature so frequent in dark on light on the succeeding L. M. I *a* pottery. The Madonna lily (Fig. 266, c) already forms the decoration of a series of fine jars found in the Magazine named from them.[3] Crocus clumps of the conventional class, such as are repeated on the large painted fragment (Fig. 271, above), already appear on the votive robes of faïence found with the Snake Goddess.[4]

Plant designs on M.M. III vases.

But the reflection of the floral designs of the wall-paintings on the pottery is even more conspicuous in the earlier phase (*a*) of the First Late Minoan Period. Some examples of this, taken from painted sherds found on the site of Knossos, are given in Fig. 276. The crocus clumps (*b*), Madonna lilies (*d*, *e*), and the grass and reeds (*f*, *g*)—a very frequent motive—as well as the vetches (*h*) are pictorial designs already found on M. M. III vases. The extent to which the reed or grass motive was in vogue on L. M. I *a* vases at Knossos is shown from the pottery found in the well at Gypsàdes (Fig. 349, p. 549, below). Other types were doubtless derived from the plants and flowers of fresco panels similar to the above, but of which we do not now possess the records. *j* is possibly a version of the 'honeysuckle' (Fig. 275, H). The flowers represented in *a* are difficult to identify: *i* seems to be of a labiate class.[5] Of the wild peas or vetches, such as we see them depicted on the 'Blue Bird' panel of the 'House of the Frescoes', another very fine example is supplied by the fragments, some of which are restored in

Reflection of floral types on walls upon L. M. I *a* Pottery.

[1] See *P. of M.*, i, p. 606, Fig. 445, *a*, *b* (Palaikastro).

[2] *Op. cit.*, p. 605; Fig. 446, p. 606.

[3] *Op. cit.*, pp. 576–8, Figs. 420, 421.

[4] *Op. cit.*, pp. 506, 507, Fig. 364, *a*, *b*.

[5] Unless it be a two-stalked ivy-leaf—of the 'sacral' class—much reduced.

FIG. 276. L. M. I *a* FRAGMENTS FROM KNOSSOS WITH PLANTS AND FLOWERS.

Fig. 277, of a very large and thick-walled cylindrical jar, from the Treasure House North-West of the Palace,[1] that also contained a magnificent hoard of

Fig. 277. Part of Large Jar showing Vetches or Wild Peas, L. M. I *a*, Knossos.

bronze vessels. Part of the border of a second similar zone appears below, divided from the upper field by a double row of disks in the unfixed white pigment on the black glaze, so characteristic of the early phase of L. M. I.

[1] See A. E., *Knossos*, *Report*, 1903, p. 116 and p. 117, Fig. 72. The jar was there erroneously brought into connexion with ceramic remains in a 'later Palace style'—L. M. II.

A fragment from Zakro of early transitional style, showing the matt white on dark technique, is given for comparison in Fig. 278, *a*. On this what appear to be bulbous plants are linked together in a conventional manner.

To the last example of a plant design, still executed in the light on dark style of Middle Minoan tradition, may be added the very beautiful

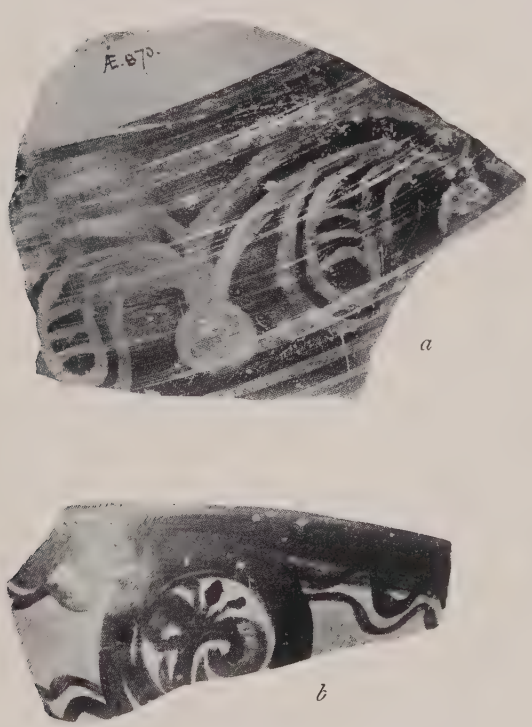


FIG. 278. TRANSITIONAL M. M. III *b*–L. M. I *a* FRAGMENTS (ZAKRO).

FIG. 279. TRANSITIONAL M.M. III *b*–L.M. I VASE WITH STAR ANEMONE (ZAKRO).

vase from the same site (Fig. 279),[1] in which the earlier and the later colour arrangements are alternately shown in the two upper zones, while in the lowest, which reproduces an originally separate stand, occurs a good example of the 'tortoise-shell ripple' motive. The transitional M. M. III *b*–L. M. I *a* phase could not be better illustrated, and the flowers of the second zone, though without surrounding dots, seem to represent the same plant as that shown on the Knossian fragment (Fig. 276, *a*). It appears to be the star anemone, so abundant on Cretan hill-sides.

[1] D. G. Hogarth, *Bronze Age Vases from Zakro*, *J. H. S.*, xxii (1902), Pl. XII, 2.

Madonna lily type.

Little removed in date from the above is another Zakro fragment (Fig. 278, *b*), showing a Madonna lily, within what seems to be intended for a coiling leaf, and an interesting reminiscence of rock borders along the upper margin. The lily, as will be seen from Fig. 276, *d* and *e*, from the site of Knossos, and the fine jar from Pseira (Fig. 284, below), plays an important part in the early L. M. I ceramic phase, as it had already in M. M. III *b*. In Fig. 276, *d*, the upper buds of the lily spray are depicted as on the earlier 'lily jars' of the Palace Magazine and on contemporary frescoes. The lily flower itself is frequently taken by Minoan craftsmen as a separate ornamental motive in various materials, such as those of the engrailed metal-work on a dagger-blade from Mycenae, of a fresco fragment from Thera, and of the intaglio designs on an ivory plaque from Phylakopi.[1] Lilies of this kind are found on cups with high bases of L. M. I *b* and L. M. II date. On cups of this form, belonging to the closing phase of the Palace at Knossos, the anthers are repeated as bars across the stamen, and this 'barred' type is also frequent on Mainland sites.[2]

Bunches of lilies as sacred flowers are seen in the hands of the Minoan Goddess or her votaries, both in frescoes like those of the Kadmeion and on signet-rings. As a decorative motive, the flower is often combined, as in Fig. 283, with the upper part of the papyrus symbol or *waz*, intensifying thus the religious value of the symbol. The crown of the Priest-King in the painted relief from the Palace and the ornamental border of the bronze basin, from what seems to have been a Treasure House by the West Court, afford magnificent illustrations of this.

[1] Dawkins, *B. S. A.*, xi, pp. 283, 284 and p. 285, Fig. 14, *b*. It was found with vase fragments of L. M. I *b* date (cf. *B. S. A.*, ix, p. 285, Fig. 5).

[2] They occur, for instance, on pedestalled cups at Korakou where from the local clay they have been described by the excavator as 'Ephyraean' (see Carl W. Blegen, *Korakou*, Pls. VI, 4 and VII, 1, p. 54 seqq.). Both in form and design, however, these goblets go back to Cretan types, themselves derived from metal prototypes (cf. E. J. Forsdyke, *B.M. Cat., Prehistoric Aegean Pottery*, p. 152, A. 858–73 and note. See, too, *J. H. S.*, xliii, p. 89). In *Pre-Mycenaean Pottery of the Mainland* (A. J. B. Wace and C. W. Blegen), *B. S. A.*, xxii, p. 182, the 'Ephyraean Ware' above referred to, there illustrated by the high-stemmed goblets, is regarded as simply a late development of Yellow Minyan. That the same local clay continued to be used in many parts of Mainland Greece as had been in use in pre-Mycenaean times is undoubted. But to make this a basis for classification is quite unwarranted. The goblets in question have not got the characteristic ringed stems of the Minyan bowls. They are not only of a purely Minoan shape, but the various painted designs that they bear are all found on Knossian cups of the same type and are all of Cretan origin. The word 'Ephyraean' should be rigidly confined to a very limited local fabric.

Olive Sprays.

Flowering olive sprays, already copied by the M. M. II vase painters,[1] are not infrequent. In the wall-paintings there are two varieties, those with spikelets of flowers suggestive of the natural arrangement, sketched in Fig. 280, and others, like that from the background of the bull-grappling scenes of the Northern entrance in Fig. 281, where the flower clusters are symbolized by a single blossom

Fig. 280. Sketch of Flowering Olive Sprays, Knossos.

Fig. 281. Olive Sprays from Frescoes of North Entrance, Knossos.

at the end of the stalk. The representation of the silvery undersides of leaves here shown was imitated at Tell-el-Amarna—a signal instance of Egyptian artistic indebtedness.[2]

Copied at Tell-el-Amarna.

Good examples of the more naturalistic type are seen on a series of cups from the site of Knossos, which again mark the transition from the

[1] *P. of M.*, i, pp. 262, 263, and Fig. 194, *g*.

[2] E. E. F. Excavations, 1927 (W. Frankfort), painted stucco fragment: Ashm. Mus.

M. M. III to the L. M. I style. The light on dark variety (Fig. 282, *a*) is here decidedly nearer to Nature, but the dark on light olive-sprays of this kind on the fine jar from Pseira, shown in Fig. 284, are also well executed. This

a *b*

FIG. 282. CUPS FROM KNOSSOS SHOWING OLIVE SPRAYS: *a*, M. M. III *b*; *b*, L. M. I *a*.

vase also shows lilies rising above Double Axes and ivy flowers in the decorative band below.

The other type in which the flower spikes are reduced to a single bloom is adopted in the hybridized sprays, illustrated in Fig. 283.

FIG. 283. OLIVE SPRAY HYBRIDIZED BY LILIES ON L. M. I *a* CUP, KNOSSOS.

Hybridized plant forms

The composite and hybridized vegetable forms, illustrated by the wall-paintings, also reappear on the pottery of the First Late Minoan phase. Amongst these a plant with leaves like Fig. 275, K, above, perhaps suggested by the common spleenwort or maidenhair fern,[1] is seen on a cup from Knossos (Fig. 283) with flowers in which recurved lily petals are combined with conventionalized papyrus. On the same cup this eclectic floral type is interchanged with another combining flowering olive spray, with the dotted

[1] *Asplenium trichomanes.*

outline of similar petals. Here the asterisks in the field between the sprays seem to reflect the facing star-like flowerets such as those seen on the frescoes. This combination is of not infrequent occurrence at this time, and a good example is supplied by a L. M. I *a* *alabastron* from Palaikastro.[1]

Papyrus: symptom of renewed intimacy with Egypt.

The appearance of the papyrus on Minoan wall-paintings of the closing phase of M. M. III—like the monkeys that accompany it—is a symptom of the closer connexion with the Nile Valley that would have been a natural consequence of the establishment of the New Kingdom. Indirectly, indeed, as has been already noted, the formal grouping of papyrus plants had already reacted on that of the native saffron flowers, as seen on the votive robes of faïence from the Temple Repositories, dating from what may be termed the 'pre-seismic' stage of M. M. III *b*.[2] In particular, the stiff alternation of buds and flowers is a thoroughly Egyptian trait. A faïence pendant, moreover, from the same deposit[3] shows papyrus tufts combined with lily petals in a somewhat more literal manner than that illustrated by the L. M. I *a* cup (Fig. 283). The suggestion here of the lily

Fig. 284. L. M. I *a* Jar from Pseira.

[1] *Unpublished Objects from the Palaikastro Excavations, B. S. A.*, Suppl. Paper I, 1923, p. 28, Fig. 25.

[2] *P. of M.*, i, p. 506, Fig. 364, *a*, *b*.

[3] *Ibid.*, p. 498, Fig. 356: to right, above.

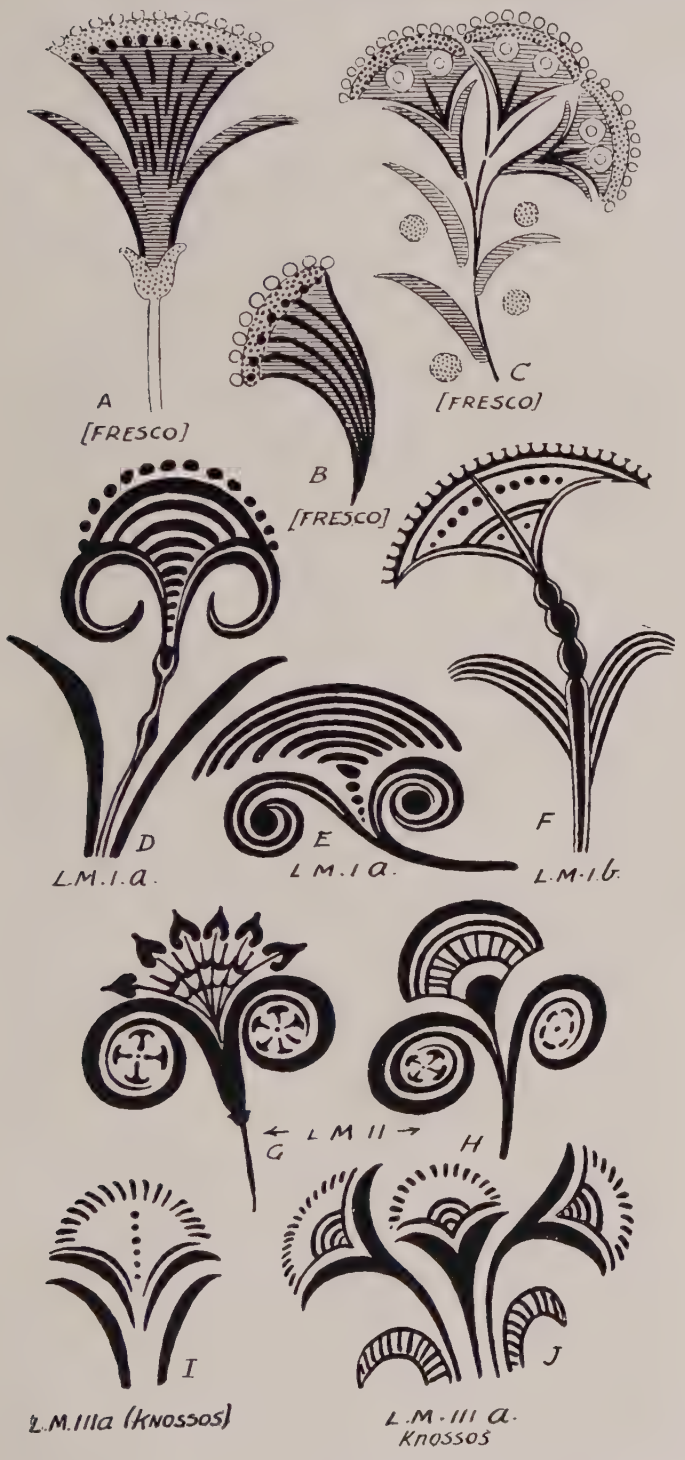


FIG. 285. A–C, PAPYRUS SPRAYS FROM WALL-PAINTINGS OF 'HOUSE OF THE FRESCOES' (M. M. III *b*) IN THEIR RELATION TO LATE MINOAN CERAMIC TYPES, D–J.

is obviously taken from the same Nilotic source as the papyrus.[1] Clearly this influence had had time to leave its mark before the date of the great Earthquake, a consideration which, as already noted,[2] must bring down the close of the M. M. III *b* phase to a later epoch than had been at first supposed.

Dependence of L. M. I papyrus types on M. M. III *b* frescoes.

In ceramic decoration, however—unlike several of the plant forms already illustrated — the papyrus only makes its appearance in the First Late Minoan phase (*a*) — a significant fact. The designs on vases always seem to follow on a stage later than the wall-paintings from which they were evidently copied, and if, as the evidence supplied by the 'House of the Frescoes' shows, the papyrus first appears in painted stucco designs of the latest M. M.

[1] See L. Borchardt, *Die ägyptische Pflanzensäule*, p. 18 seqq. Die 'Lilien'-Säulen. The Egyptian lily already appears on the Throne of Usertesen I, at Tanis.

[2] See above, p. 311.

III phase, the comparatively late reflection of it on the vases was a natural consequence.

From the early part of the First Late Minoan Period onwards, however, the papyrus is a constantly recurring theme of the vase painters, and the imitative forms, diverging farther and farther from the pictorial originals, are seen to supply a good clue to the successive stages of Late Minoan and Mycenaean ceramic art.

In the Comparative Fig. 285 three specimens (A, B, C) of papyrus are given from the fragments of wall-paintings found in the 'House of the Frescoes', and, below them, some characteristic ceramic types going down to the earlier phase of L. M. III. It will be seen that the L. M. I *b* example (F), from a Kakovatos 'amphora', shows a slight reversion to the pictorial prototype (C) above it, the tuft being divided as there by a central bract, the two disks or eyes on either side of this still surviving as a pair of dots. This ceramic type is of special importance as demonstrating the dependence of the lesser art on fresco designs such as those before us. The decorative adaptation of the subject by the vase painters who worked in the later 'Palace style' is well illustrated by Fig. 285, G and H. Here the strongly recurved leaves—anticipated already by D of L. M. I *a* date—suggest the favourite Madonna lily type, such as we also see in the hybrid design on Fig. 283. But influences here converge. The palm-tree motive, described below, has also often to be taken into account, which itself was assimilated to a fleur-de-lis motive of decorative evolution.[1]

The triple spray given in J, with the arch of rays above, belonging to the early part of L. M. III, stands at the head of a long series of types going down to the very end of the Minoan Age. It is noteworthy that some of the very earliest specimens, such as D, on a bowl found in a pure L. M. I *a* medium at Niru Khani, already show a radical transformation.

The 'Sacral Ivy' Motive.

The 'Sacral Ivy' on wall-paintings.

Among the plant designs depicted on these frescoes a special place must be reserved for what may be not inaptly termed the 'sacral ivy'. Fig. 286 shows a restored drawing of some sprays of this, springing from a margin of rocks in the panel reproduced in the Coloured Plate X, containing the forepart of a blue monkey. Trailing sprays of this mystic plant, identical in all details, recur on the analogous frescoes from Hagia Triada. The outline of the leaves and the serpentine course of the central stem, taken in connexion with the character of the flowers, sufficiently demonstrate that

[1] See below, p. 495.

FIG. 286. 'SACRAL IVY' (PARTLY RESTORED) CLIMBING OVER ROCKS; 'HOUSE OF THE FRESCOES' (cf. Coloured Plate X).

Its origin from Canopied Papyrus Wand, (*Waz*).

we have here an intentional assimilation with ivy. Yet the plant that we see here was a natural growth of no terrestrial region. The outline of its leaves, incurved below and acuminated at their points, was itself derived from a geometrical figure—the C-curve of the Early Minoan decorative system, sometimes seen with coiled ends arching over the *waz* or papyrus stalk symbol (Fig. 287, *c*, *d*), which, as we have seen, was the special emblem of Wazet,[1] the Delta Goddess, whose haunt was the papyrus thickets of Buto. As

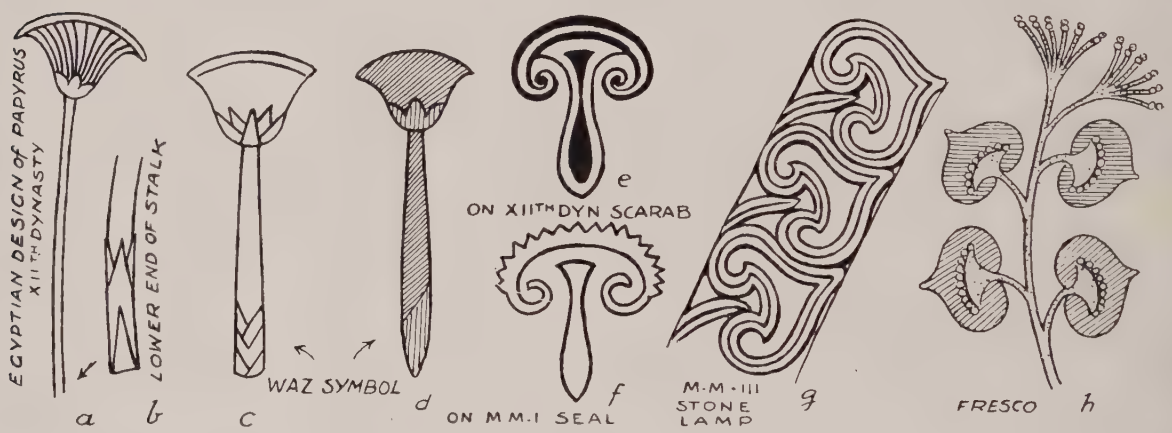


FIG. 287. COMPARATIVE TABLE ILLUSTRATING THE ORIGIN OF THE 'SACRAL IVY'.

a Snake Goddess—presumably of Libyan origin—she may almost be regarded as a double of the Goddess of Minoan Crete in her chthonic aspect, while, in Egypt, she was assimilated with the Mother Goddess Hathor. The persistent repetition of this symbol in Minoan Art from the beginning of the Middle Minoan onwards can hardly have been without a definite religious significance.

M. M. III examples of Canopied *Waz*.

In Fig. 287, *e*, from a Twelfth Dynasty scarab,[2] we already see it fitted with the arching canopy, which finds a parallel on the more or less contemporary M. M. I seal (Fig. 287, *f*). In the closing Middle Minoan Period this conventional type becomes part of an ornamental frieze, or border, of constant recurrence. It is well dated by the bronze cup of Vapheio shape from Tomb XII at Mochlos (Fig. 288, *c*), found with M. M. III pottery.[3] Decorative bands with this design in relief are seen winding up the pedestal of the beautiful lamp of purple gypsum from the early South-East House (Fig. 288, *a*),[4] which also lies within the M. M. III Period. Of special

[1] *P. of M.*, i, pp. 509, 510.

[2] See, too, *P. of M.*, i, p. 201, Fig. 150, *b*. Another specimen has now been discovered in the M. M. II deposit of Tomb XVII at Mavro Spelio (see p. 557, below).

[3] Seager, *Mochlos*, p. 62, XII *f*, and Fig. 31. Mr. Seager remarks: 'This cup is a very good specimen of M. M. III metal-work.'

[4] See *P. of M.*, i, p. 345, Fig. 249.

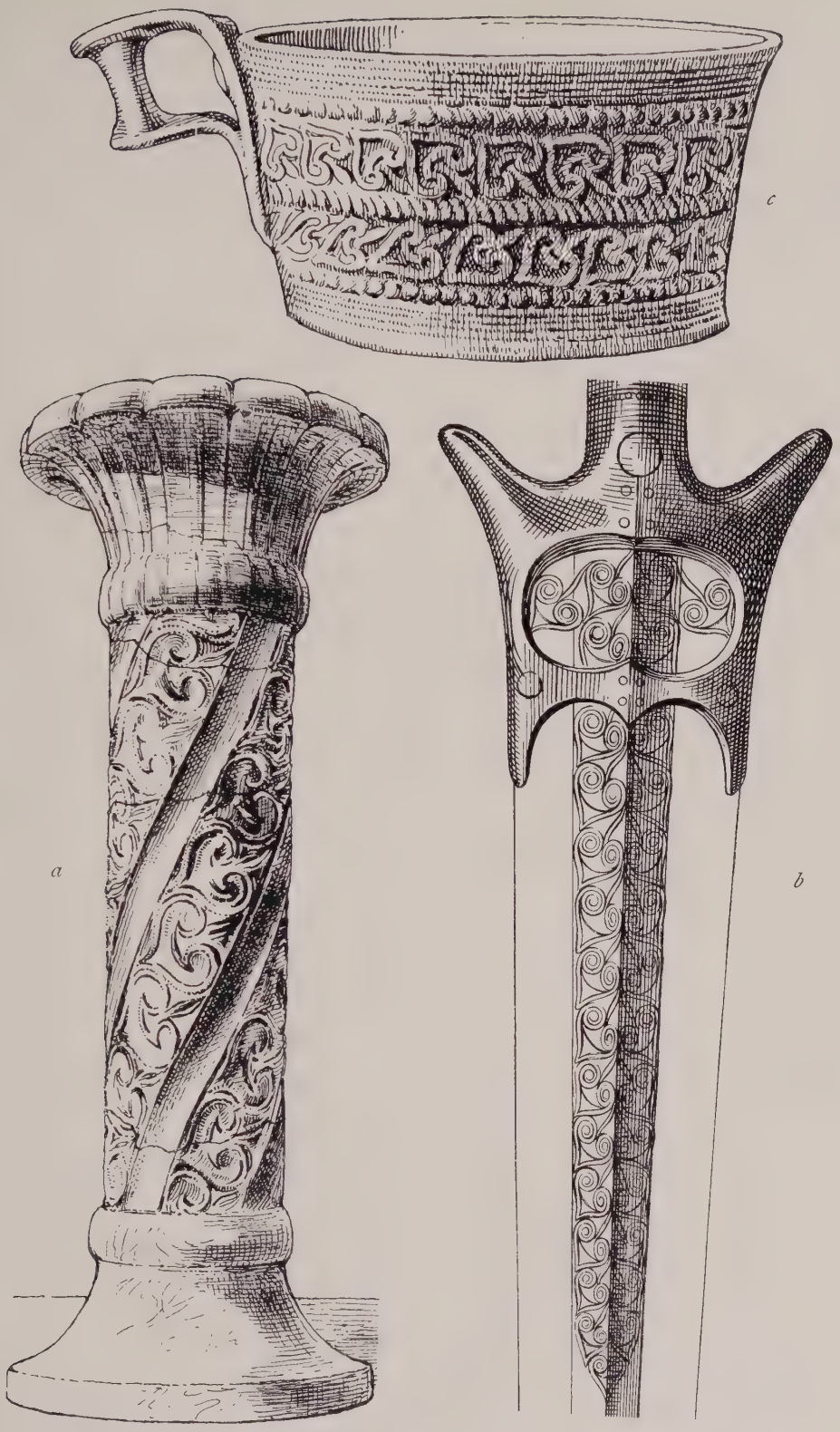


Fig. 288. Canopied *Waz* (M. M. III). *a*, Pedestal of Lamp ; *b*, Section of Sword ; *c*, Bronze Cup.

interest, moreover, is the ornamental band of the same kind engraved along the median rib of a blade of a short-horned sword from a Mycenae Shaft Grave, and restored for me by Monsieur E. Gilliéron, fils, in Fig. 288, *b*. In this case the double row of excrescences running out from the central angle of

FIG. 289. 'RING OF NESTOR': FROM BEEHIVE TOMB, OLD PYLOS (KAKOVATOS). SCENES OF AFTER-LIFE DIVIDED BY TREE OF WORLD. 1, GODDESS AND COMPANION, CHRYSALISES AND BUTTERFLIES AND YOUNG COUPLE RESTORED TO LIFE. 2, LION GUARDIAN, ETC., TENDED BY HANDMAIDENS OF GODDESS (see above, pp. 341, 342) AND 'SACRAL IVY' SPRINGING FROM TRUNK. 3, 4, INITIATION SCENE, ENTHRONED GRIFFIN AND GODDESS. DRAWN BY E. GILLIÉRON, FILS. (*c.* $\frac{4}{1}$)

the rib, broader at the base and ending in a single foliation, decidedly suggests the leaves running out from the stem of a plant. This, in fact, supplies the immediate antecedent stage to the pictorial form of our fresco where the whole is assimilated to a spray of ivy, with its characteristic blossom; the leaves, however, retaining a lively reminiscence of the original papyrus symbol. The same motive recurs on a bronze basin from the palatial hoard described below.[1]

Attribute of 'Elysian Fields' on 'Ring of Nestor'.

On the remarkable gold signet-ring, known from the place of its discovery as the 'Ring of Nestor', the scenes of initiation into the after-life are divided by the trunk and branches of a Minoan 'Tree of the World'. Here there can be little doubt, even on the minute scale in which it is engraved, that the plant, the shoots of which spring forth from the trunk to give shade

[1] See below, p. 642, and Fig. 408.

to the lion guardian of the realms below (see Fig. 289), must be identified with the same 'Sacral Ivy' that climbs the rocky steeps in this cycle of wall-paintings.[1] The heart-shaped leaves and even the double terminal tufts of flowers are distinctly indicated. These leafy offshoots, moreover, are not shown as branches of the tree, but are clearly extraneous growths like ivy or mistletoe, but the latter is here excluded from its very different form. The tree itself is bare of foliage like the medieval 'Tree of Paradise'[2] that prolonged the tradition of some much earlier congener of Yggdrasil. At its foot here, in place of the 'loathly serpent' Nidhöggr, crouches a dog-like animal, the Minoan prototype of Cerberus—with a single head.

May we not perhaps go even farther? This conspicuous spray—with its green leaves picked out, as we see them in the fresco, by the bright orange outline of the sacred emblem—springing from the hoar and barren trunk of the tree that here seems to stand on the borders of the Minoan Underworld, might it not itself have possessed some mystic power? It is impossible not to recall the Golden Bough, which, when plucked by Aeneas, opened for him the passage to Avernus.[3] But ever, as one was torn away, another branch of gleaming gold sprang in its place.

Such a connexion with the Elysian Fields of Minoan Religion might itself be taken to imply that the *waz* or papyrus wand symbol of the Delta Goddess—which, through all its developments, formed the essence of this motive—still imparted to it some sanctifying virtues in its revived vegetable form.

'Sacral Ivy-leaf', a character of Minoan Scripts.

It seems, moreover, to have been known by some special religious name. A very interesting indication of this is to be seen in the appearance of the ivy-leaf as a frequently recurring sign of both classes of the advanced linear scripts, and, in one unique case, in the hieroglyphic series (see Fig. 290). It denoted a single idea, occurring in both the linear classes, not

[1] See A. E., *The Ring of Nestor* (*J. H. S.*, 1925, and Macmillan and Co.), pp. 67, 68. See, too, above, p. 341, Fig. 194, *f*.

[2] An account of the 'Tree of Paradise' is, curiously enough, preserved in a fifteenth-century poem by the Cretan writer, Georgios Chumnos of Candia (see *Old Testament Legends, from a Greek poem on Genesis and Exodus by Georgios Chumnos*, by F. H. Marshall (1925, Cambridge University Press: translated by him). For the bareness of the Tree, see IV, 75, 76, p. 26:

> Ἀραχνιασμένον, ἤτονε τὸ φλούδιν τουππεσμένον
> ἦτον ξερὸν παντέρημον, τὰ φύλλα μαδισμένον.
>
> The bark had fallen to the earth o'erspun with spider's weft,
> The tree was dry and desolate and of all leaves was reft.

[3] Virg. *Aen.* vi. 136 seqq.

> Latet arbore opaca
> Aureus et foliis et lento vimine ramus,
> . . . . . .
> Sed non ante datur telluris operta subire,
> Auricomos quam qui decerpserit arbore fetus.
> Hoc sibi pulchra suum ferri Proserpina munus
> Instituit. Primo avulso non deficit alter
> Aureus, et simili frondescit virga metallo.

This magic branch was compared by Virgil with mistletoe (v. 205, 206). Cf. Frazer, *The Golden Bough* (Ed. i, vol. ii, p. 359 seqq.).

only in sign-groups, as having a phonetic value, but singly, as an ideograph, sometimes separated from a group by one of the usual dividing strokes.[1] At times it is connected with both male and female personal names, or at any rate with groups headed by an ideograph either of a man or a woman. That it is not a 'leaf'-sign in general, but that it represents the same 'sacral' plant as that seen on the wall-paintings and vases, is clearly demonstrated by Fig. 290, *g*, belonging to the Linear Class B, where the curved upper outline of the contained papyrus tuft survives in the same manner as on certain vases.[2]

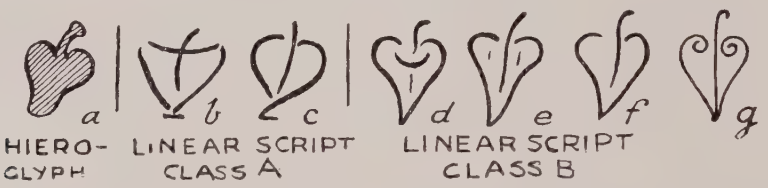


FIG. 290. THE 'SACRAL' IVY-LEAF AS CHARACTER OF MINOAN SCRIPTS.

Possible connexion with Cypriote *Vo*.

There is at least a possibility, moreover, that the *waz* symbol which lies at the root of this Minoan sign may have preserved at least some approximation of the sound of the Egyptian original, in which case its initial element would have resembled a *w* or *v*. In this connexion it is interesting to observe that the Cypriote = *Vo*—which, in contradistinction to the 'broad arrow' , has a bent stem—seems to be a 'leaf'-sign.[3]

Sacral Ivy-leaf on L. M. I vases.

In variant forms the elements of this design are taken over into the painted decoration of vases of L. M. I *a* and *b* date. On a lower zone of the remarkable L. M. I *a* jar from Pseira, already illustrated above in Fig. 284,[4] we see a continuous band formed of linked ogival canopies of this class, where the sacral spray itself is represented by ivy flowers in the place of the papyrus heads. A closely parallel foliation also appears on an amphora (Fig. 294) of the same early L. M. I date from Old Pylos[5]

[1] It is common in both linear classes and occurs at Hagia Triada by itself on clay nodules. At Knossos, on tablets of Class B, it is frequently found at the beginning of sign-groups, some of them apparently personal names both male and female, and at times is separated from the succeeding group by the diacritic mark as noted in the text. A fuller account of this sign will be given in the second volume of my *Scripta Minoa*.

[2] See below, p. 488 and Fig. 295.

[3] The examples here given are taken from Deecke's table, Collitz, *Sammlung der griechischen Dialekt-Inschriften*, i, opp. p. 80.

[4] R. B. Seager, *Excavations on the Island of Pseira, Crete*, Pl. VII and p. 26. This vessel is profusely decorated both with white paint and the 'new' red.

[5] Kurt Müller, *Alt-Pylos* (*Ath. Mitth.*, xxxiv, 1909), pp. 315–17 and Fig. 16 from

FIG. 291. DEVELOPMENTS OF 'SACRAL IVY' PATTERN ON L. M. I *b* VASES (*a*, *b*, *c*, KAKOVATOS; *d* *e*, KNOSSOS; *f*, KAHUN).

Natural ivy-leaves.

(Kakovatos) with ivy flowers outlined within the curves, originally suggested by the upper margins of the papyrus tufts. That natural ivy-leaves had been already arrived at by the same epoch is shown, amongst other evidence, by the lower section of a vase from Palaikastro[1] and by a zone of a pedestalled bowl from Gournià,[2] with another band above, showing conventionalized sand and pebbles also borrowed from wall-paintings (Fig. 292). It is also well illustrated by the lower zone of an interesting transitional jug (M. M. III *b*–L. M. I *a*) from the Sixth Shaft Grave at Mycenae,[3] showing in its upper half and handle an imitation of basket-work. The ivy-leaves here have an inner white border (Fig. 293).

It is in the more advanced phase (*b*) of the First Late Minoan Period, however, that the 'sacral' ivy-leaf itself is most in evidence. On a fragment of an amphora of this date, from Kakovatos[4] (Fig. 291, *b*), we see in a reserved space both the

Fig. 292. Pedestalled Bowl from Gournià.

Fig. 293. Jug of Transitional M. M. III *b*–L. M. I *a* Style from Sixth Shaft Grave, Mycenae.

Tomb A. See, too, my *Ring of Nestor* (*J. H. S.* 1925), pp. 44, 45 and Fig. 41.

[1] See *B. S. A.*, Suppl. Paper: *Palaikastro Excavations*, 1902–6, Pl. XIII, 1 *b*.

[2] Boyd-Hawes, *Gournià*, Pl. IX, 1.

[3] Specially drawn for me in the Museum by Monsieur E. Gilliéron, fils.

[4] Kurt Müller, *Alt-Pylos* (*Ath. Mitth.*, xxxiv, 1909), Pl. XXIV, 7.

central shoot and the dots, representing the disks on either side, as shown on the fresco design (Fig. 285, c) above. In this and other cases the leaves are sharply acuminated at their extremities, while the lower margins coil down in a decorative fashion, but no longer contain the stellate flowers seen in the earlier series. An interesting variation is supplied by an 'amphora' fragment from the 'Aegisthos Tomb' at Mycenae, where the record of the upper margin of the papyrus tuft is preserved within the leaf by a reversed horseshoe (Fig. 295).[1] This type is of great archaeological importance since we have here a parallel to the curved lines above the central spikes of the degenerate sprays on L. M. III *a* pottery of the Tell-el Amarna stage.[2]

Survival of curved papyrus outline within ivy-leaf.

FIG. 294. AMPHORA, L. M I *a*, FROM OLD PYLOS (KAKOVATOS) (THE ORNAMENT COMPLETED).

At times, as on the Knossian specimen (Fig. 291, *d*), the Kakovatos amphora (Fig. 291, *a*)[3] and other examples from the Messenian Pylos,[4] Mycenae,[5] Thebes,[6] and else-

[1] *B. S. A.*, XXV, Pl. XLIX, *c*.

[2] E.g. *B.M. Cat., Prehistoric Aegean Pottery*, (E. J. Forsdyke), p. 188, Fig. 269, Tell-el-Amarna. So, too, from Thebes, Ἀρχ. Ἐφ., 1909, Pl. III, 10.

[3] *Ath. Mitth.*, XXXIV (1909), Pl. XVIII, 2 (here completed).

[4] Kuroniotis, Ἀρχ. Ἐφ., 1914, p. 115, Fig. 25; who compares a then unpublished fragment of a large jar from Phylakopi (*ibid.*, Fig. 26). It is certainly a Cretan import, possibly from Knossos.

[5] E. g. on a fragment probably of a 'filler' (according to a note kindly supplied me by Prof. J. Droop), from the 'Aegisthos' Tomb, Mycenae (*B. S. A.*, XXV, Pl. XLVII, *b*).

[6] E. g. on L. M. I *b* pots from Tomb 26 of the Kolonakion (Keramopoullos, Ἀρχ. Δελτ.,

where, the 'leaf' with the survival of the curved papyrus tuft within it broadens out into a purely geometrical design.

Ivy-leaf naturally reproduced in L. M. I *b*.

Finally, the fully developed naturalistic form of the ivy-leaf, already reached in L. M. I *a*, also finds a place in the decorative repertory of the later phase. It is illustrated by the well-known jug from the First Shaft Grave at Mycenae,[1] which is closely paralleled by the designs on an amphora from a *tholos* tomb of the Messenian Pylos.[2] On these there is no longer a trace of the papyrus tuft, but both show a survival of L. M. I *a* technique in the linear application of unfixed white on the dark foliage as veins or borders. As to the assignment of both these vessels to the phase *b* of that Period there can, however, be no doubt, and both, in fact, show a reflection from the marine style, then so much in vogue, in the recurring disks with five or, at times, six curved 'rays' suggestive of star-fish or more particularly of the common 'brittle-star' (*Ophiothrix*) with its five coiling arms.

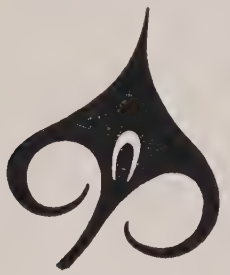


Fig. 295. Vase Fragment from 'Aegisthos' Tomb, Mycenae.

The natural ivy appears very prominently in the form of large single leaves on the jug (Fig. 291, *e*) from the West side of the Palace at Knossos. On the other hand, the Kakovatos 'amphora'[3] (Fig. 291, *c*) displays a series of double-stalked plants, with similar natural leaves, climbing up its sides. Such ivy-like leaves in single sprays, moreover, are a common feature on a class of *aryballi* derived from a New Empire type of Egyptian *alabastron* and on a parallel series of small, one-handled *alabastra*, of which the specimen from the Maket Tomb at Kahun supplies a well-known example[4] (Fig. 291, *f*). A series of these 'one-handled' *alabastra*, ranging

1917, p. 200, Fig. 144, 1, and p. 201, Fig. 145).

[1] Schliemann, *Mycenae*, p. 160, Figs. 232, 233 (fragments); Schuchhardt, *Schliemann's Excavations*, p. 187, Fig. 161 (restored, but without the characteristic white veining); Furtwängler und Löschke, *Mykenische Vasen*, Pl. 2 (fragment showing the details in matt white).

[2] K. Kuroniotis, Ἀρχ. Ἐφ., 1914, p. 113 and Pl. II, 1.

[3] Kurt Müller, *loc. cit.*, Pl. XXII, 2.

[4] Petrie, *Illahun, Kahun, and Gurob*, Pl. XXVI, 44, p. 23, and *Egyptian Bases of Greek History* (*J. H. S.*, xi, 1890), Pl. XIV, 1 and p. 293. This vessel, from Coffin no. 9, was first attributed by Petrie (*loc. cit.*) with the rest of the contents of the tomb to Rameses II's time, and approximately to 1100 B. C. Later on, in *Egypt and Early Europe* (*Trans. R. Soc. Lit.*, xix, p. 16) he referred it to Thothmes III's time (1503–1449 B. C.), and this view is accepted by Dr. H. R. Hall (*Aegean Archaeology*, 1915, p. 102). In my own opinion both the form and decoration of the vessel agree with this dating.

from L. M. I *a* to the Mainland equivalent of L. M. II, is given at the end of this Section.

Thus, by a truly remarkable chain of metamorphoses, the original papyrus stem, coupled with a canopy above, after passing through a succession of decorative and more or less geometrical types, returned to life as a vegetable form throughout, belonging to quite a different family.

Divergent lines derived from Geometrical type.

But in one respect, though the leaf on the vases resembles that of the Southern ivy closely enough, traces of an origin outside the vegetable world still left its mark on this sacral plant. There is a double or even treble stalk, the ends of which often diverge or form parts of a chain.[1] This itself has nothing to do with the papyrus stem, but is a recurring decorative feature of the 'ogival stems'[2] which in Minoan borders—as shown in the ideal sketch of the inset—often forms part of a continuous ornament linked by the returning spirals.

This decorative feature is of great interest since the inherent tendency towards divergent lines, springing from the lower part of the heart-shaped figure, gives the key to another form of decorative design, characteristic of the L. M. I *b* phase, to which the name of 'ogival canopy' motive may be conveniently applied.

The 'Ogival Canopy' Motive.

This motive is well exemplified on Cretan soil by the painted jug found in the lower stratum of House *β* at Palaikastro[3] with other pottery of the same Period (Fig. 296 A, *a*). The shoulders of a fragmentary vessel from Knossos present part of a similar design, while the cup (Fig. 296 A, *b*), one of four specimens from the Vapheio Tomb, supplies a close parallel.[4] This decorative design, moreover, is repeated with brilliant effect—combined in this case with sprigs of coralline taken from the marine cycle—on the fine amphora from the Beehive Tomb A at Old Pylos (Kakovatos) (Fig. 296 A, *c*)

[1] For a remarkable Pontic offshoot of the triple-stemmed ivy-leaf see below pp. 658, 659, and Fig. 422.

[2] A connexion between the 'ivy-leaf' and this geometrical pattern was already pointed out by Miss Edith H. Hall (Mrs. Dohan) in her excellent dissertation on *The Decorative Art of Crete in the Bronze Age* (Philadelphia, 1907), pp. 37, 38. The materials for the history of its combination with the *waz* symbol were not then accessible.

[3] R. C. Bosanquet, *B. S. A.*, ix (1902–3), pp. 284–6 and Fig. 5. The deposit in which this jug occurred also contained an inscribed clay tablet of the Linear Class A, showing that in the East of Crete this form of script was still in vogue in L. M. I *b*.

[4] Tsountas, Ἀρχ. Ἐφ., 1889, Pl. VII, 19 and p. 154.

already cited as presenting the four horizontal rows of handles of the earlier 'pithoid' type. As an example of the application of a decorative motive

b *a* *c*

FIG. 296 A. SPECIMENS OF VASES SHOWING 'OGIVAL CANOPY' MOTIVE: *a*, PALAIKASTRO; *b*, VAPHEIO; *c*, KAKOVATOS. (ALL L. M. I *b*.)

artistically developed to fit in with the contours of the vessel, this specimen must take a high place.

The Theban amphora[1] (Fig. 296 B) presents the same motive under a somewhat heavier aspect. It has, however, a special interest from the information supplied by the alternating broad ivy-leaves, from which the festoons proceed, as to the origin of this decorative type.

[1] A. Keramopoullos, Ἀρχ. Ἐφ., 1910, Pl. IX, 2.

In the light of the comparative examples given in Fig. 297 there can, indeed, be no doubt that the 'ogival canopy', the origin of which has not hitherto been recognized,[1] is in fact an outgrowth and dependency of the 'Sacral Ivy' class. Thus, in *a* of the Comparative Figure, on a sherd from Knossos, we see a continuous pattern in which the decorative motive given in the inset, p. 489, is combined with the recurved upper outline of the papyrus tuft. In *b*, from Aegina,[2] a detached example of this class is shown with two divergent 'stalks', the lower part of the papyrus tuft being here marked by a *swastika*. Figs. 296 B, 297, *c*, from Thebes, supply a typical example of broad ivy-leaves alternating above and below, and joined by the 'ogival' curves. This type, which belongs to the later stage, *b*, of L. M. I, is in fact directly dependent on a similar decorative arrangement of the 'sacral ivy-leaves' and stalks that had already made its appearance in the very earliest phase of L. M. I. Good illustrations of this have already been supplied, in the painted ewer from the Sixth Shaft Grave at Mycenae (Fig. 293) and by the Gournià pot (Fig. 292), both of L. M. I *a* date.[3] Fig. 297, *g*, taken from a Kakovatos amphora,

An outgrowth of 'Sacral Ivy'.

FIG. 296 B. AMPHORA FROM THEBES (= L. M. I *b*) SHOWING 'OGIVAL CANOPY' MOTIVE AND IVY-LEAVES.

[1] Bosanquet, *loc. cit.*, explained it as 'a conventional representation of seaweed growing from rocks'. It is, as will be seen, wholly distinct from the 'Marine style' which, however, on the Kakovatos type (Figs. 296 A, *c*, 297, *f*) is seen to have reacted on it.

[2] *Jahrbuch d. Deutschen Arch. Inst.*, 1925, p. 323, Fig. 6.

[3] See above, p. 486.

proves, moreover, that this pattern survived in its original shape into the early part of L. M. I *b*.

Traces of influence of Marine class.

The detail (Fig. 297, *f*), taken from another Kakovatos amphora, shows that by this time the 'marine style' was beginning somewhat to affect the fully developed 'ogival canopy' motive. A two-branched coralline sprig

FIG. 297. ORIGIN OF 'OGIVAL CANOPY' MOTIVE (*a*, KNOSSOS; *b*, AEGINA; *c*, *d*, THEBES; *e*, VAPHEIO; *f*, *g*, KAKOVATOS).

Swastikas derived from 'Brittle-stars'.

is here, in fact, introduced within the lower part of the curve belonging to the original leaf, in place of a record of the papyrus tuft. It is probable, moreover, that the revolving geometrical ornaments, 'triquetras', and *swastikas* continually associated—as in Fig. 297, *b* and *g*—with these and other developments of the 'Sacral Ivy' pattern represent the recurring 'brittle-stars' of the same marine cycle. These were also taken over into the palm-tree group described above.

This 'ogival canopy' motive is specially characteristic of the mature L. M. I *b* style, and it is interesting to note that it supplies the decoration of a set of cups that mark the last ceramic stage of the Vapheio Tomb (Fig. 296 A, *b*).[1] Like the 'Sacral Ivy' itself, it was much in vogue at Mycenae and other Minoan sites of the Morea; it recurs at Aegina,[2] and extends to Thebes[3] and Volo.

[1] The form of these cups, doubtless itself of metallic origin, is interesting as supplying the prototype of the pedestalled cups of L. M. II.

[2] *Jahrbuch d. D. Arch. Inst.*, xl (1925), pp. 322–4, Figs. 5 and 6. It was imitated on native Aeginetan ware (*loc. cit.*, Fig. 5 *b*).

[3] Besides the amphora, Fig. 296 B ('Αρχ. 'Εφ., 1910, Pl. VII, 1), a good example of this

One feature—which is common to all the types of the 'Sacral Leaf' that appear on pottery—is its association with chains of dots or minute disks. These, indeed, sometimes cover a large part of the field, but are always arranged in rows, and are therefore to be distinguished from the mere speckling such as has been shown to be a derivative from various kinds of stoneware.

Association of 'Sacral Leaf' with beaded festoons derived from 'Jewel' frescoes.

The explanation of these dotted festoons is to be sought in a quite different direction. They represent, in fact, a simpler version of the form of ornament taken over from the strings of beads and pendant jewels of the toilette scenes dear to the Minoan wall-painters, and of which a fuller ceramic illustration is seen on L. M. I *b* vases, such as Fig. 248, p. 427, above.

Fig. 298. Group of Three Date-palm Trees on M. M. II *b* Polychrome Vase at Knossos.

'Three Palms' Motive.

M. M. II date-palm group.

The most remarkable ceramic type of the closing M. M. II phase is the group of three date-palms rising from slightly undulating ground seen on a stately two-handled jar from the Loom-Weight Area already illustrated in the previous Volume of this work (see, too, Figs. 298, 299).[1] An interesting feature here is the inflorescence, springing up from the central stem—a local touch, since, in Northern Crete,[2] at any rate, the dates hardly ripen. In the Carthaginian world, on the other hand, where the date-palm fruited freely, this canting badge (*φοῖνιξ*) of the Phoenician race is consistently represented on the coinage with the dates—its most important product—hanging down.

That this group with the central tree slightly higher than the other two, which are somewhat inclined away from it (see sketch, Fig. 298), represents a pictorial motive in vogue at that epoch, may be also gathered from

motive is supplied by a three-handled *alabastron* from Grave 26 of the Kolonakion (Keramopoullos, Ἀρχ. Δελτίον, iii, 1917, p. 200, Fig. 144, 3).

[1] *P. of M.*, i, pp. 253–6 and Fig. 190.

[2] On the coins of Priansos in Southern Crete, where the climate is much less subject to boreal blasts, the dates are seen hanging down (cf. Svoronos, *Numismatique de la Crète ancienne*, Pl. XXVIII, 21 seqq.; *B.M. Cat., Crete*, Pl. XVIII, 6–9).

a contemporary agate intaglio (here reproduced) presenting a group of three palm-trees rising in a rocky knoll (Fig. 299).[1] In this case, too, the central palm is taller than the others which, in fact, are mere saplings, sloping away from it as in the previous case. Palm-trees standing alone also occur on a late polychrome pot from Phaestos of approximately the same date.

Survival of pictorial tradition of three palms.

It is a fair conclusion that a group of palm-trees on a knoll or slight elevation, as seen on the above examples, answered to some painted plaster design, decorative in form but perhaps essentially of a religious character,[2] that filled a prominent place on the Palace walls. It is possible, indeed, that they may have been associated in the original composition with human or animal figures which, owing to the unwritten law of Minoan ceramic Art, were omitted in the vase-paintings, and the occurrence of inflorescent palm-trees, of the same tradition, among the bull-hunting reliefs of the Vapheio Cup corroborates this suggestion. There are direct indications that wall-paintings of this cycle go back in the Knossian Palace at least as far as the beginning of the Third Middle Minoan Period.

Fig. 299. Disk-shaped Bead-seal: Banded Agate (Central Crete).

The group of three palms, in this case separate repetitions of similar trees in a slanting position, recurs in an ornamentalized form on an ostrich-egg 'rhyton' from Knossos, illustrating the surviving polychromy of M. M. III *a* (Fig. 301, B). What is more remarkable, however, as showing the extent to which this design had become a *cliché*, the triple group, consisting of a taller and two smaller palm-trees, characterizes a series of vases, from Crete and elsewhere, belonging to the later phase, *b*, of the First Late Minoan Period. A still later survival of this Middle Minoan pictorial type may, indeed, be recognized on the repoussé design of a gold mouthpiece (Fig. 300) from a rich tomb at Enkomi or Old Paphos, in Cyprus.[3] This tomb (No. 93) contained a silver ring, belonging to the beginning of the reign

On L. M. I *b* vases.

On gold mouthpiece L. M. III *a*.

[1] See *P. of M.*, i, p. 274, and Fig. 204, *d*.

[2] On a lentoid bead-seal from Palaikastro the Horns of Consecration are seen before a palm-tree beside which a dog seizes an *agrimi* (see my *Mycenaean Tree and Pillar Cult* (*J. H. S.*, xxi, 1901), p. 154, Fig. 131). In *op. cit.*, p. 156, Fig. 134 (crystal ring from Mycenae) two bulls kneel on each side of a similar sacred palm-tree, more decoratively rendered, while two smaller trees are seen behind them.

[3] *B.M. Excavations in Cyprus*, Pl. VII, no. 517 and cf. pp. 42, 43: from Tomb 93. This tomb also contained the fine gold ornaments, *op. cit.*, Pls. V and VI. A fragment of good L. M. III pottery with wrestlers occurred in the *dromos*.

of Amenhotep IV,[1] *c.* 1380 B. C., as well as a scarab of his mother, Queen Tyi. In this case the palm-trees are somewhat incongruously associated with goats.[2]

FIG. 300. GOLD MOUTHPIECE WITH REPOUSSÉ DESIGN OF DATE-PALMS.

A feature, common from the beginning to the ceramic types showing this palm-tree group, is the exaggerated curves of the lower branches which more resemble those of the petals of a lily and, in derivative types, obscure their true arboreal source. In this recurved shape we must certainly trace the reaction of an ornamented fleur-de-lis motive already evolved by vase-painters and of which a good example is given in the inset from a fine polychrome pot belonging to the earlier M. M. II phase.[3]

Grass-like excrescences on later types traced to inflorescence of date-palm.

It is not only in the reminiscences of the triple grouping that the later palm types on vases, as seen in the Comparative Table (Fig. 301, D, E, F), agree with the M. M. II prototypes. The curious grass-like excrescences that appear on either side of the upper part of the palm-tree and that also accompany its degenerate offshoots, as seen on certain later types of Mainland pottery (Fig. 301, G, H, J, K), find their explanation in a special feature visible in the prototypes, A and B. This is the inflorescence that characterizes the date-palm, and, in order to make the connexion more clear, I have introduced the ideal form, C, to supply a link of transition in the considerable gap that at present exists between the M. M. III *a* form B and the L. M. I *b*

[1] See on this, H. R. Hall in F. Poulsen, *Zur Zeitbestimmung der Enkomifunde*, *Jahrb. d. D. Arch. Inst.*, XXVI (1911), p. 221. A silver ring found in this grave gives the titles of Amenhotep IV when he was still orthodox.

[2] On Minoan and Mycenaean gems palm-trees also occasionally appear in association with goats. Bulls and lions, however, are more frequent in this connexion.

[3] *P. of M.*, I, opp. p. 247, Coloured Plate III (left).

FIG. 301. COMPARATIVE TABLE ILLUSTRATING EVOLUTION OF DATE-PALM TYPE ON MINOAN VASES (A, KNOSSOS, M. M. II *b*; B, KNOSSOS, M. M. III *a*; C, IDEAL 'TRANSITIONAL TYPE'; D, THEBES, BOEOTIA = L. M. I *b*; E, KAKOVATOS, L. M. I *b*; F, EGYPT (PROBABLY FROM CRETE), L. M. I *b*; G, THEBES = L. M. II; H, VOLO = L. M. II; J, K, KORAKOU, CORINTH = L. M. II).

types D and E.[1] Fig. 302 shows a L. M. I *b* 'rhyton' from Pseira[2] presenting decorative palm-groups in the same style as those of the Kakovatos amphoras (cf. Fig. 301, E). F[3] is of special interest since, while it fits on to the latter and is unquestionably of the same date, it is taken from a clay *aryballos* found in Egypt, and was itself not improbably an article of Cretan export. A fragment of a similar vessel from Zakro[4] (Fig. 303) shows a curtailed example of this, approaching some Mainland forms.

FIG. 302. L. M. I *b* 'RHYTON' FROM PSEIRA, CRETE, WITH GROUPS OF DECORATIVE PALMS.

This Cretan equation with an imported Minoan vessel found in Egypt receives an interesting confirmation from the contents of a tomb of Thothmes III's time at Sakkara, illustrated below in Fig. 304.[5] The *aryballos* (Fig. 302, *f*) shows the palm-tree motive in exactly the same stage of development as Fig. 301, F, from the parallel Egyptian deposit and associated as there and at Zakro with a rosette ornament. The decorative lilies, on the other hand, on the shallow cup found with the larger vessel correspond with those on a very fine L. M. I *b* amphora from a tomb at Mycenae.[6] We

FIG. 303. ON FRAGMENT OF *ARYBALLOS*, ZAKRO, CRETE. SLIGHTLY COMPLETED.

[1] For D see Keramopoullos, Ἐφ. Ἀρχ., 1910, Pl. VIII (Thebes); E is from a Kakovatos amphora; Kurt Müller, *Ath. Mitth.*, xxxiv, 1909, Pl. XXII, 2.

[2] Seager, *Pseira*, p. 25, Fig. 8.

[3] Von Bissing, *Ath. Mitth.*, xxiii (1898), Pl. XIII, 3, and p. 258.

[4] See E. J. Forsdyke, *B.M. Cat., Prehistoric Aegean Pottery*, p. 114, Fig. 148, A. 707. The degenerate palm-trees are described (*loc. cit.*) as 'flowers which resemble crocus plants in bud'. Cross influences, indeed, from other vegetable forms must never be left out of account.

[5] For this information and the photographs I am much indebted to Mr. C. M. Firth, now published in his and Mr. Battiscombe Crunn's *Excavations, Teti Pyramid Cemeteries*, 1926, Pl. XLII and pp. 69, 70. According to Dr. H. R. Hall the Egyptian vessels are of the earlier Eighteenth Dynasty Class.

[6] R. C. Bosanquet, *J. H. S.*, xxiv (1904), Pl. XIII and p. 322 seqq. The connexion of the marine types with the Cretan fishers' craft is there admirably shown (pp. 320, 321).

have here an important series of chronological indications pointing to a date round about 1500 B. C. for the evolution of this L. M. I *b* stage.

FIG. 304. CONTENTS OF EGYPTIAN GRAVE OF THOTHMES III'S TIME AT SAKKARA, CONTAINING L. M. I VESSELS. *a*, MUMMY AND ASSOCIATED VESSELS, AS FOUND; *c* AND *d*, TYPICAL POTS OF EARLIER PART OF THE EIGHTEENTH DYNASTY; *b*, *e*, SYRIAN POTS; *f*, L. M. I *b*, *ALABASTRON* WITH PALM-TREE AND ROSETTE MOTIVES; *g*, SHALLOW L. M. I *b* CUP WITH *WAZ*-LILY ORNAMENT. FROM PHOTOGRAPHS BY MR. C. M. FIRTH.

Late Mainland degenerations.

Of the derivative forms here given, all of which belong to a Colonial class equivalent to the Cretan L. M. II, widely distributed on the Mainland

side, G, from Thebes,[1] shows a coalescence with the 'ogival canopy' motive that gives it the appearance of a plant with roots, and this feature is shared by the two specimens from cups of Korakou (J, K).[2] H, which illustrates a variant type, is from Volo.[3] Failing the catena of transitional forms, given in Fig. 301, no one would have suspected that such designs as are illustrated in the last-named examples were derived from an original design depicting an inflorescent date-palm.

Decisive Influence of Fresco Designs of Walls on Vase-painting.

Whatever route we follow, we are thus led back to the decisive influence exercised on the vase-painter's Art by fresco designs on the walls that were in vogue in the preceding Age. Not only the rocky borders and backgrounds derived from the rugged Cretan landscape, and the flowers and vegetable forms—including the 'Sacral Ivy'—that supply such a brilliant contrast, but even the jewellery of the figured compositions all find a place in their decorative repertory. Only the human subjects themselves and, for that matter, animal forms in general, are wanting. The ban on these, indeed, was only altogether raised at the time of the entry on the scene of a new ethnic element, which we have every reason to identify with the Achaean, at an epoch when the traditional culture both in Crete and Mainland Greece—however much of the older elements it still retained—had ceased to be in any true sense 'Minoan'.

Absence of human and animal forms on vases down to L. M. III.

This change in ceramic fashion was not by any means abrupt. Already at an earlier date birds occasionally appear and a few exceptional figures of Sphinxes, and we have evidence of religious scenes, on clay *larnakes* of late L. M. III date, copied, no doubt, from the painted designs on sarcophagi, like that of Hagia Triada. A descending God appears on a L. M. III *larnax* from Milato and traces of a chariot scene, such as is frequently repeated in the Cypriote groups, on another, from Knossos.[4] But for compositions like those of the 'Warrior Vase' and the *agrimi* hunt on the bowl from the Artsa Grave in East Crete[5] we have to wait till an epoch when the new element was already beginning to exert its sway and the bowed form of fibula had made its appearance.

[1] Keramopoullos, Ἀρχ. Δελτ., iii, p. 144, Fig. 106.

[2] C. W. Blegen, *Korakou*. For J (here completed) see p. 65, Fig. 73, 2. For K, Pl. VII, 2.

[3] P. Wolters, *Ath. Mitth.*, xiv (1889), Pl. IX, 1 and p. 264.

[4] In the Ashmolean Museum, from the Zafer Papoura Cemetery. The design is only faintly traceable and was discovered in the process of cleaning in the Museum.

[5] Xanthudides, Ἐφ. Ἀρχ., 1904, Pl. iii, and pp. 33, 34.

Marine Pieces and their Ceramic Imitations.

The manifold imitations of plant designs, copied from the M. M. III frescoes by the vase-painters of the beginning of the Late Minoan Age, and notably the constant repetition of certain types such as the reeds or grasses, show what an extensive vogue this naturalistic style must have had in the wall decoration of the closing Middle Minoan phase. The further exploration of Minoan houses, of the same date as the 'House of the Frescoes', will doubtless supply much corroborative material.

Marine subjects on M. M. III frescoes.

It is somewhat strange that, while flowers and plants culled from this landscape style were at once taken over into the ceramic repertory, the marine pieces, of the existence of which we have so much direct evidence in the Third Middle Minoan Period, should have left so small a mark on L. M. I *a* vase-painting, though in the succeeding phase (L. M. I *b*) they may be said to have come in with a rush. The phenomenon, moreover, is the more remarkable since this marine style is already seen reflected on a M. M. III burial jar from the Pachyammos Cemetery, illustrated in the First Volume of this work,[1] showing dolphins with rocks above and a pebbly beach—or sea-floor—below. In another sepulchral pit of that cemetery there was found, indeed, a similar jar of transitional type, presenting dark dolphins picked out with 'matt' white on a light buff ground.[2]

Only frequent on vases in L. M. I *b*.

Marine subjects in 'House of Frescoes'.

It seems as if, owing to some change of fashion, terrestrial scenes had come into greater favour with the fresco painters of the latter part of M. M. III, probably because they offered a greater variety of brilliant hues. It is clear that in the case of the 'House of the Frescoes' the fragments belonging to the marine class, though well represented, are by no means so abundant as the other group. Specimens of these are given here in Fig. 305, including part, apparently, of an argonaut shell such as is so often repeated in the faïence relief panel with flying-fish and a rock-work border from the Temple Repositories, and here, as there, without its tentacles. The other fragments here reproduced show rocks with seaweed and coralline clinging to them, and at times fringing small blue pools, while below is seen a margent of sea sand with golden grains.

Marine style fully developed at Knossos by M. M. II *b*.

But the most exquisite forerunners of the later L. M. I marine ceramic style must be sought in small reliefs on vases and engraved seals. This style can, in fact, be traced much farther back at Knossos than in any other locality, owing to its appearance, already in a fully developed form, on some

[1] *P. of M.*, i, p. 608, Fig. 447 *a* (see Seager, *Cemetery of Pachyammos*, Pl. XIV and p. 23).

[2] *P. of M.*, i, p. 608, Fig. 447 *b* (Seager, *Cemetery of Pachyammos*, Pl. IX).

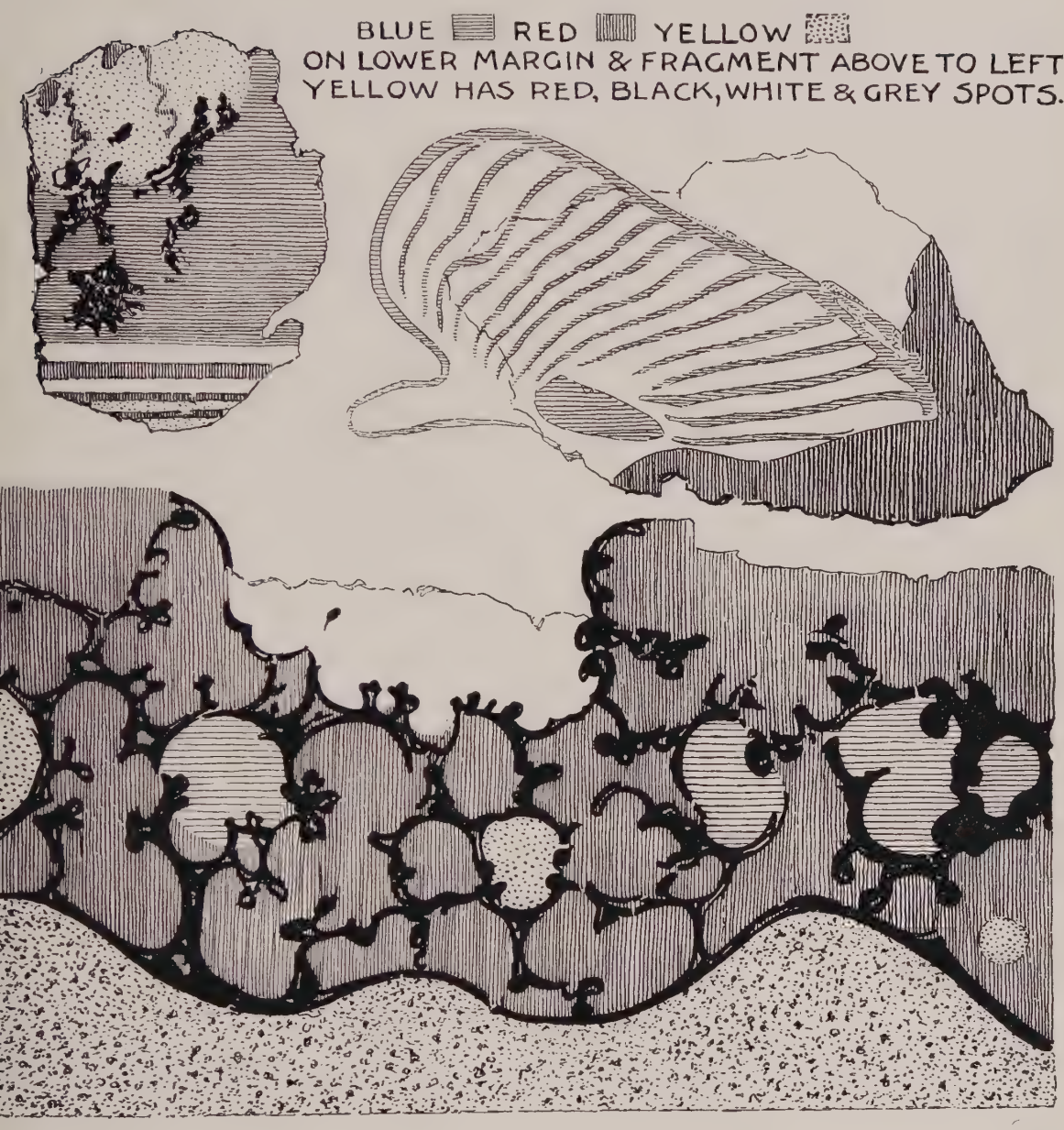


FIG. 305. PARTS OF WALL-PAINTINGS IN 'MARINE STYLE' FROM 'HOUSE OF THE FRESCOES'.

of the beautiful clay seal-impressions found in the 'Hieroglyphic Deposit' of the Palace, and belonging to the mature phase, *b*, of the M. M. II Period. One of these has already been referred to[1] as supplying a good example of

Seal-impression from 'Hieroglyphic Deposit'.

[1] See above, p. 453, Fig. 265.

grotesque rock-work belonging to the same epoch. Another specimen of these, here enlarged in Fig. 306,[1] shows a fish and some kind of long-bodied octopod—perhaps the 'musk-scented' cuttle-fish of common Mediterranean occurrence[2]—surrounded by rocks, as if stranded in a sea-pool.

Octopus and corallines on M. M. III 'Rhyton', Knossos.

But the finest of all known examples of this marine style is supplied by part of a steatite 'rhyton' found above the floor of the 'Room of the Throne' at Knossos, for the first time reproduced in Fig. 130, p. 227, above; it may have drifted into the position in which it was found from the Treasury of the restored Palace, to which the objects found in the space known at the time of the excavation as the 'Stone Vase Room' also belonged. Its form practically represents the same stage of evolution from the original ostrich-egg type as the Harvesters' vase from Hagia Triada,[3] and it seems safest to refer its execution to the concluding phase of M. M. III.

Fig. 306. Marine Design on Seal-impression from Hieroglyphic Deposit, Knossos (M. M. II).

Dolphin and rocks on Knossian relief.

The natural beauty of the designs on this 'rhyton' will be best realized from its development in Fig. 307.[4] The rich decorative effect produced by the coiling of the tentacles about the rocks and corallines is particularly striking. The creature itself is half concealed, but one watchful eye looks out from its ambush.

A dolphin, swimming above rocks, with sea-growths, on another contemporary fragment of a Knossian steatite vessel, is repeated in this place[5] as illustrating another aspect of the same style. The crabs, shells, and barnacles and other 'frutta di mare', moulded with such marvellous naturalism on sides of clay vessels from the 'Kouloura' of the West Court,[6] supply further remarkable illustrations of this class of relief from the Palace site, all belonging to the last Middle Minoan Period.

[1] See, too, *P. of M.*, i, p. 273, Fig. 202, *b* (on a smaller scale).

[2] *Eledone moschatus* (Lam.): the Italian 'moscardino'.

[3] See above, Table, p. 225, Fig. 129, 6.

[4] By Monsieur E. Gilliéron, fils.

[5] See, too, *P. of M.*, i, p. 273, Fig. 202, *b*.

[6] *Ibid.*, i, pp. 521, 522, and Figs. 380, 381.

In close dependence on the intaglios and reliefs of this kind executed in soft stone are those in which similar marine designs have been taken over into repoussé metal-work. The actual transition to this, as already

Marine reliefs taken over into repoussé metal-work.

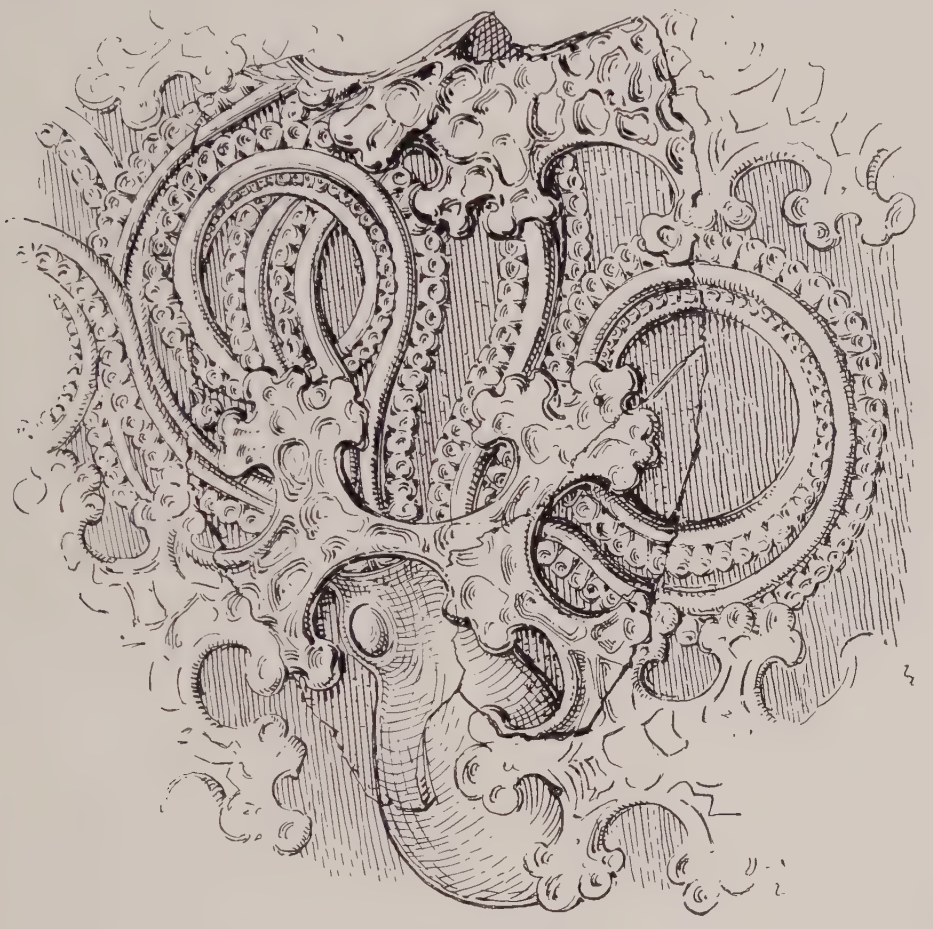


FIG. 307. DEVELOPMENT OF DESIGN ON STEATITE 'RHYTON' FROM KNOSSOS: THE AMBUSHED OCTOPUS.

shown, is seen in a 'flattened cylinder' of black steatite of M. M. III date from Palaikastro, where a thin gold plating has been carefully impressed into the engraving of dolphins swimming among rocks.[1] Steatite vases with reliefs were, as we knew, similarly plated, and in the next stage we see the vessel itself executed entirely in gold plate, of which an example is supplied by the 'rhyton' fragment from the same site with the charging boar.[2] Of this, so far as the 'marine style' is concerned, a good example

[1] *Ibid.*, i, p. 675, Fig. 495. *Palaikastro Excavations* (*B. S. A.*, Suppl. Paper I, 1923, p. 137, Fig. 118).

[2] *Ibid.*, i, p. 676, Fig. 496, and R. M. Dawkins,

has been long supplied by the cup from the Third Shaft Grave exhibiting dolphins and rocks in repoussé work, recalling those of the plated intaglio, above described, itself, if we may judge from the associated painted vase, of L. M. I *a* date.

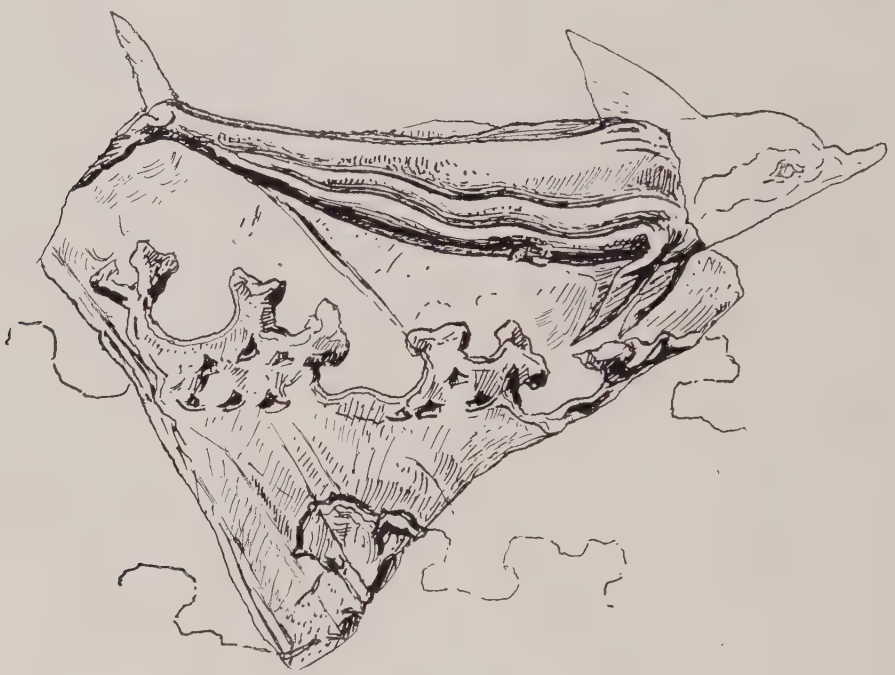


Fig. 308. Relief of Dolphin swimming above Rocks on Fragment of Steatite Vessel, Knossos.

Marine relief on handle of Minoan bronze amphora from Cyprus.

Probably contemporary with this and of considerable historical value is the repoussé plate of the handle of a bronze amphora from Kurion in Cyprus.[1] On it are three octopods with tentacles incompletely shown, and what appear to be the coiling tentacles of 'brittle-stars'[2] with rocks and seaweed round. On the bow of the handle of this vessel Minoan Genii are associated with a central figure, based on the sacred crocodile of the Egyptian Goddess Reret. On the rim are embossed ewers,[3] such as these Genii generally bear, and the bronze amphora itself has every appearance of having been of ritual usage.

[1] M. Markides, *A Mycenaean Bronze in the Cyprus Museum*; *B. S. A.*, xviii, p. 95 seqq., and Pl. VIII. There and elsewhere the vessel is wrongly described as a 'cauldron'. It had S-shaped handles (for restoration see p. 652, Fig. 417, below).

[2] *Ophiothrix*. Representations derived from this are frequent in vase-paintings of the 'marine style'.

[3] See below, p. 654 and Fig. 419.

The surface of the marine reliefs is not very well preserved, but the original design was evidently very naturally executed, and the date of the work cannot be very distinct from the lower borders of the Third Middle Minoan Period, to which the great masterpieces of this style in soft stone and plastic materials belong. In other words, it can hardly be brought down later than the First Late Minoan Period.[1] This bronze vessel, as will be seen, supplies very interesting evidence of a commercial relation between Crete and Cyprus in the days of the intensive enterprise overseas, which brought fine marine types of this ceramic class not only to Mainland Greece but to Egypt. It is referred to below in connexion with works of the men of Keftiu, as seen on Egyptian monuments.[2]

Keftiu work.

FIG. 309. HANDLE OF BRONZE AMPHORA FROM CYPRUS WITH 'MARINE' RELIEF AND MINOAN GENII.

A more imposing specimen of a marine design in repoussé metal-work is now before us in the magnificent golden bowl discovered by Professor Axel Persson and the Swedish Mission, above a skeleton, apparently of a royal personage, in a beehive tomb at Midea in the Argolid.[3] Beautiful, however, as are the reliefs on this bowl, they clearly belong to a distinctly later phase of the style than those of the Knossian 'rhyton' (Fig. 307),

Golden bowl from Midea.

[1] Parts of a similar bronze amphora, probably from the same site, are in the Cesnola Collection in the Metropolitan Museum at New York. Perrot et Chipiez, iii, pp. 794, 795, and Figs. 555, 556; cf. Myres, *Cesnola Collection of Antiquities from Cyprus*, pp. 478, 479, no. 4753. Besides similar figures of ewer-holding genii, it shows bull's heads facing and, on the rim, lions hunting bulls, but there is no decoration in the 'marine style'.

[2] See below, p. 652 seqq.

[3] A preliminary account with a large illustration of the underside of a bowl was given by Mr. A. J. B. Wace in the *Illustrated London News*, Sept. 18, 1926, from materials supplied by Professor Persson. See, too, Monsieur C. Picard, *C. R. de l'Acad.*, i, Sept. 17, 1926, 225–6.

and to a time when decorative influences have begun slightly to interfere with the purer naturalistic element. The tentacles of the octopods have lost the picturesque variation of their interlaced coils, and give a slight

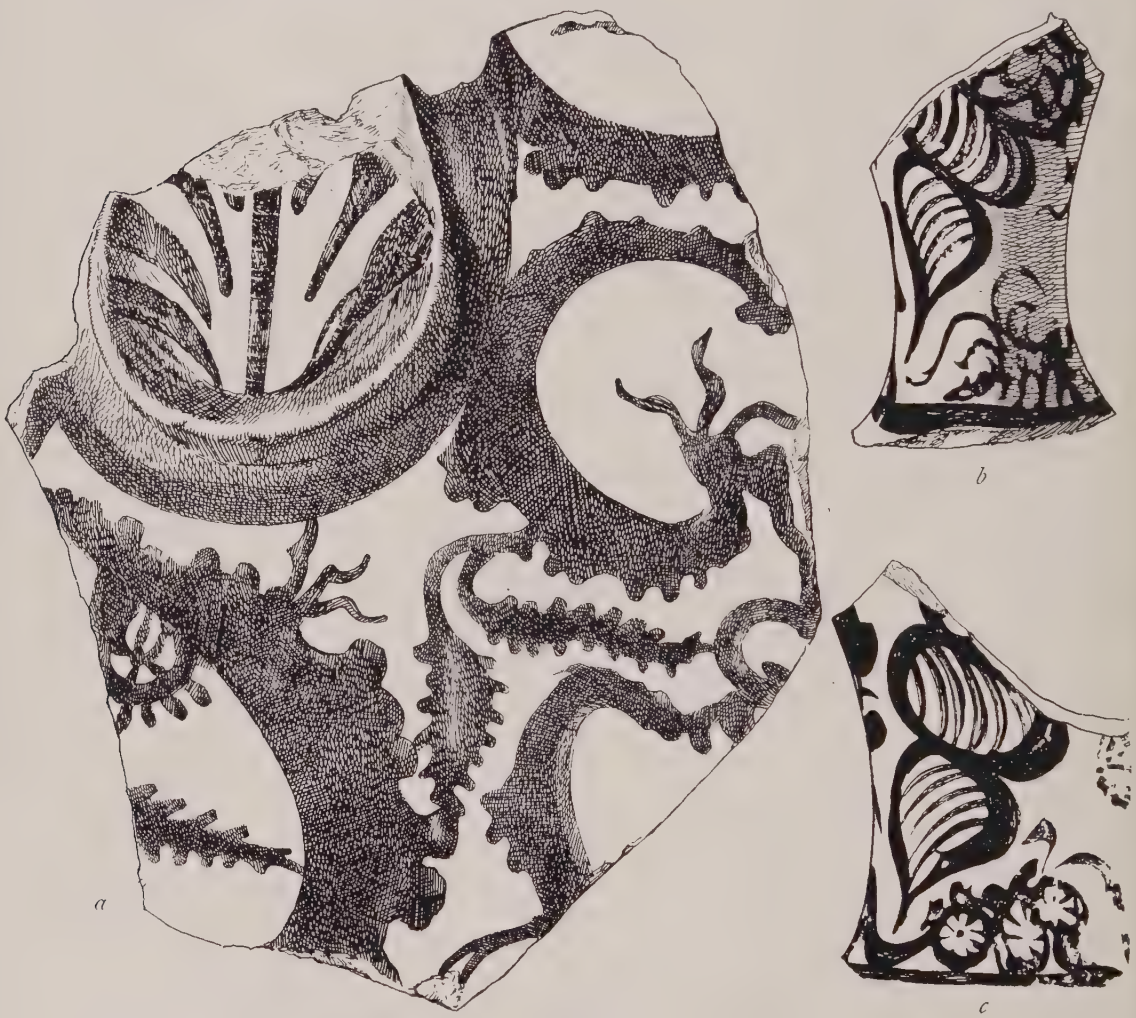


FIG. 310. *a*, FRAGMENT OF LARGE AMPHORA, WITH SEAWEED AND CORALLINE; *b*, PART OF BASE OF A 'FLOWER-POT' VASE WITH TRITON SHELL, ETC.; *c*, BACK OF SAME, DEVELOPED. KNOSSOS.

suggestion of methodical combing out. Vegetable shoots, moreover, of a terrestrial character have intruded themselves in places on the rock-work in place of the corallines and seaweeds, and betray the reaction of contemporary works to which the Vapheio cups belong, and where, in fact, they represent infant palm-trees. It is, indeed, a significant fact that two silver

cups of the Vapheio form with similar bull-hunting reliefs were found with the gold bowl. The pebbly sea-bottom, however, seen within the rock border, is of true pictorial tradition, and the marine subject itself has a fine appropriateness to the embossed figures of ships that are made to sail around the upper border of the bowl.

Influence of metal reliefs on L. M. I *b* marine types on vases.

It is clear that, in tracing the origin of the marine style of vase-painting that characterizes the later phase of L. M. I, account must be taken of intermediate models directly supplied by vessels of steatite, faïence, or precious metals as well as of the influences of frescoes on the walls. Certain features on ewers of this class, like that of the Marseilles Museum, clearly point to metallic prototypes, even showing the rivet-heads at the upper attachment of the handle. It must always be borne in mind, however, that as an element of purely ceramic decoration marine subjects were of great antiquity in Crete. Fish among rocks and sea-shells are already found, indeed, in the earliest stage of Middle Minoan polychromy,[1] followed by symmetrical versions of octopus,[2] more literal figures of which begin to appear in M. M. III. By the closing phase of M. M. III, moreover, true naturalistic marine designs of dolphins swimming beside a rocky border and with the pebbled sea-bottom visible below are already, as we have seen, depicted on a Pachyammos urn.[3]

The 'Marseilles Ewer'.

Influence of pictorial designs on walls.

'Dolphin Fresco' at Knossos and 'marine' fragments from 'House of Frescoes'.

In these ceramic works we may again see the reflection of fresco designs, like that of the dolphins and other fish, found in the area of the Queen's Megaron at Knossos. The marine fragments from the 'House of the Frescoes' have now supplemented this by showing that the creatures and growths of the rocky sea margin, the shells, seaweeds, and corallines, were also treated in detail by the Minoan wall-painters of the close of the Middle Minoan Age.

Knossos a centre of L. M. I *b* marine style on vases.

It is reasonable to suppose that Knossos, where so far as the evidence goes the picturesque marine style, in relief work, at any rate, had its earliest source and found its most splendid development, was also a principal centre of the later ceramic fabrics with this class of decoration. Numerous painted fragments of vases illustrating such designs have, indeed, come to light, but, owing to the fact already referred to, that the L. M. I *b* phase, to which these belong, was not marked by any break of cultural continuity either in the Palace itself or the adjacent houses, so far as they have been

[1] See *P. of M.*, i, p. 182, Fig. 131, *a*, *b*; fish in the latter case swimming among what may be very conventional rocks; Coloured Plate I, *b* and *d*, some kind of volute shell.

[2] A decorative version of an octopus appears on a M. M. II bowl from the Kamares Cave (*op. cit.*, p. 246, Fig. 186, *f*).

[3] *Op. cit.*, p. 608, Fig. 447 *a*.

explored, the evidence is still of a fragmentary kind. Typical specimens from the site are given in Fig. 310, *a*, showing part of the side and handle of a large amphora adorned with corallines and seaweeds, and representing the perforated base of a 'flower-pot' vase, on which, together with other marine growths, are depicted whorl-shells probably to be identified in this and other cases with the tritons that were used, as we know, for trumpets in Minoan ritual. Argonauts, as well as these, are combined on other fragments from this site with corallines and seaweeds

a *b*

FIG. 311. HANDLES OF EWERS: *a*, KNOSSOS; *b*, MARSEILLES MUSEUM.

forming parts of compositions indistinguishable from those seen on more perfect vases found on sites like Gournià[1] and Palaikastro[2] in the East of the Island. Among the characteristic types of vessels that display this marine decoration, the beaked jugs that inherit a characteristic L. M. I *a* form[3] and broad *alabastra* recur in Melos[4] and Egypt[5] as well as on the Mainland side, affording thus a strong presumption of having been of Cretan fabric. But the most definite evidence is afforded by the well-known 'ewer' in the Marseilles Museum.[6] Not only do the little argonauts on this strongly recall Knossian examples such as that reproduced in Fig. 312, *b*, but the handle, with its three rivet-heads at the upper attachment and its central rib, Fig. 311, *b*, presents a very near parallel to that—also belonging to an

'Marseilles Ewer', from Egypt; probably Knossian fabric.

[1] Boyd-Hawes, *Gournià*, Pl. H.

[2] *Excavations at Palaikastro* (*B. S. A.*, 1923, Pl. XIX, *a*, *b*, and Pl. XXI).

[3] Cf. p. 436, Fig. 253, E, above (from 'House of Frescoes', L. M. I *a*). For L. M. I *b* versions with marine decorations compare *B. S. A.*, xvii, Pl. XI, no. 140 (Phylakopi); Perrot et Chipiez, *op. cit.*, p. 869, Fig. 436, Egypt.

[4] R. M. Dawkins, *Excavations at Phylakopi*, 1911 (*B. S. A.*, vol. xvii, Pl. XI, no. 137).

[5] For that from Erment see H. R. Hall, *The Relations of the Aegean with Egyptian Art* (*Journ. of Egypt. Arch.*, vol. i), Pl. XVI, p. 110. Dr. Hall makes no reference in the text. (Cf., too, Hall, *Aegean Archaeology*, Pl. XXI, 2.)

[6] Perrot et Chipiez, *Hist. de l'Art dans l'Antiquité*, Pl. VI, p. 926, Fig. 486 and p. 928, Fig. 488.

FIG. 312. POTTERY WITH MARINE DECORATION, L. M. I *b*. *a*, 'MARSEILLES' EWER, CRETAN, FOUND IN EGYPT; *b*, KNOSSOS; *c*, GOURNIÀ; *d*, *e*, PALAIKASTRO; *f*, PSEIRA.

Similar handle with imitation rivet-heads from Knossos.

oenochoê—illustrated in the fragment in Fig. 311, *a*, which came to light a little to the West of the Palace. According to Maspero,[1] who had reason to be well informed in the matter, the ewer must also be reckoned among Egyptian finds and, in view of the above parallel, it may be confidently regarded as an importation from Knossos. The greater part of a handle of similar type with a central rivet-head above was found at Lahun.[2]

Fine examples of 'Marine Style'.

For complete specimens in the fine marine style from Cretan sites it is, as already observed, necessary to turn to the evidence supplied by the floor-deposits of a series of private houses excavated on various sites in the East of the Island. The 'stirrup vase' from Gournià (Fig. 312, *c*), showing an octopus with 'glaring eyes and squirming sucker-covered arms',[3] affords a notable example of these—a beautifully natural refinement on this being the tentacle coiled round the mouth. Closely allied to this is the gourd-shaped flask (Fig. 312, *d*) which, together with an elegant jug closed by a strainer above, had been placed in a large jar under the stairs of a house at Palaikastro [4] as a valuable personal possession.

Hoard of 'Rhytons' in House of Palaikastro.

The hoard of seventeen 'rhytons', both of funnel shape and of the elongated pear-like form,[5] several of them with marine designs, from another house at Palaikastro,[6] of which a specimen is given in Fig. 312, *e*, had supplied a further remarkable record of the vogue of this style in Crete. They were associated with examples showing the jewelled necklace pattern with pendant crocuses,[7] and chains of the ogival canopies enclosing the survival of papyrus heads.[8]

The 'Marseilles ewer' (Fig. 312, *a*), found, as we have seen, in Egypt, and betraying Knossian features in details of its fabric and decoration, supplies, as its rivet-heads show, a good example of the influence of a metal prototype.

Together, the vases shown in Fig. 312 supply a good conspectus of the fashions in ceramic decoration prevalent about the beginning of the

[1] *Cat. du Musée Égyptien de Marseille*, no. 1043. According to another account (cf. F. von Bissing, *Ath. Mitth.*, xxiii (1898), p. 237) it came from Tyre, but the other finds of contemporary vases greatly corroborate Maspero's statement. None are known from Syria.

[2] In the Ashmolean Museum.

[3] Hall, *Aegean Archaeology*, p. 90 and Fig. XXIII (Boyd-Hawes, *Gournià*, Pl. H).

[4] R. C. Bosanquet, *Palaikastro Excavations*, i (Suppl. Paper, *B. S. A.*, 1923), p. 45 seqq. and Pl. XVIII, *i*. The jug, *ibid.*, Pl. XVIII, *b*, shows papyrus sprays and rosettes resembling the patterns on two amphoras from Grave A at Old Pylos (K. Müller, *op. cit.*, Pl. XX, 1, 2).

[5] See the Comparative Table, Fig. 129, p. 225 above (Pseira).

[6] Bosanquet, *op. cit.*, p. 49 seqq. and Plates XIX–XXI.

[7] *Op. cit.*, p. 53, Fig. 40.

[8] *Op. cit.*, p. 51, Fig. 39, *a*.

later phase of L. M. I. That the marine style, though specially characteristic of L. M. I *b*, had already overlapped the earlier phase, *a*, of that Period, in its purest pictorial form, is shown by the occurrence of the fine 'stirrup vase' of this class (Fig. 312, *c*) in a purely L. M. I *a* medium at Gournià, and by the similar association of a cylindrical vessel with the same style of decoration at Niru Khani.[1] In both these cases we may venture to recognize the intrusion into a group of local fabrics, executed on the received lines, of specimens of the marine style.

'Marine Style' overlaps L. M. I *a*.

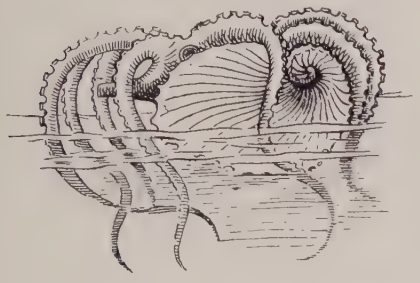


FIG. 313. ARGONAUT SWIMMING.[2]

There was from the first a tendency of the mere decorator to break up the unity of the really fine compositions covering the whole surface, as in the case of the octopus vases from Gournià and Palaikastro (Figs. 312, *c*, *d*).

Progressive decay of Marine decoration.

a *b* *c* *d* *e* *f*

FIG. 314. *a*, ARGONAUT TYPE ON L. M. I *a* VASE, GOURNIÀ; *b*, REDUPLICATED FORM ASSIMILATED TO S-SCROLL AND TENDRIL PATTERN; *c* (FROM MYCENAE GOLD PLATE: see above, p. 196); *d*, *e*, *f*, L. M. III TYPES WITH TRIPLE AND QUADRUPLE COILS.

Even in such fine examples as the 'Marseilles ewer' and on one of the amphoras of Kakovatos[3] we notice a more or less mechanical repetition of separate entities such as the argonauts.

[1] Xanthudides, Μινωικὸν μέγαρον Νίρου (Ἀρχ. Ἐφ., 1922, p. 20, Fig. 17). Excepting some larger *pithoi* in the M. M. III *b* style all the pottery from this house was of the L. M. I *a* class.

[2] From Chenu, *Manuel de Conchyliologie*, p. 17, Fig. 44.

[3] Kurt Müller, *Ath. Mitth.*, xxxiv (1909), Pl. XVIII, 1.

It is to be observed, moreover, that, while papyrus tufts of the succeeding 'Palace style' (L. M. II) are transformed so as to form part of magnificent architectonic compositions, designs of the 'marine style', even where they occur on the great Palace amphoras, are already decadent, without this compensating quality.[1] The tentacles of the octopus are finally resolved into a series of monotonous undulations. So, too, the tentacles of the delicate and beautiful argonaut shell, Fig. 313, tend to become a mere pattern, consisting of triple or quadruple coils, Fig. 314.

Its L. M. III stage.

Thus in the final stages of decadence, such as can be traced through the various phases of L. M. III, the component elements of these once pictorial designs are more and more divorced from their original marine associations. The original motive in each case becomes a mere nucleus for a geometrical arrangement of coils and undulations, which, indeed, sometimes survive without their nucleus. The triton finally unrolls its whorls till it is hardly distinguishable from a corkscrew.

[1] Examples of such Palace amphoras belonging to the close of L. M. II will be given in a succeeding Section of this work.

'One-handled Alabastra' of Painted Clay.

FIG. 315. 'ONE-HANDLED ALABASTRA' FROM CRETE, EGYPT, AND MAINLAND GREECE: *a*, HAGIA TRIADA (L. M. I *a*, DIAM. 13·5 CM.); *b*, VOLO (L. M. I *a*); *c*, MYCENAE, THIRD SHAFT GRAVE (L. M. I *a*); *d*, MAKET TOMB, EGYPT, PROBABLY THOTHMES III'S TIME (L. M. I *b*); *e*, VOLO (L. M. I *b* STYLE); *f*, VOLO (L. M. I *b* SURVIVAL, MAINLAND EQUIVALENT OF L. M. II).

§ 54. 'The Little Palace' and its Pillar Cult: the Bull's Head 'Rhytons'.

Discovery of 'Little Palace'; Belongs to beginning of New Era, but with traces of earlier structures—section of S. façade; Site and Plan of building; Entrance system; Peristyle and Megaron—magnificent suite of halls; Lobby and main staircase; High gypsum door-jambs in place of wood—symptom of timber shortage; Crude bricks from upper stories; Sunken Lustral Area—later used as Fetish Shrine; Impressions of fluted columns; Stone lamp with quatrefoil pedestal—Egyptian architectonic type; Clay sealings with religious types; Ante-room and dependencies of Lustral Area; Deep basement with Pillar Crypts—corresponding Upper Halls; Pillar Crypt in S.W. Angle; Double-axe stand and bull's head 'rhyton' from chamber above; The inlaid 'rhyton' of black steatite—attachments for horns and ears; Crystal eye with painted pupil and iris; Rayed medallion over bull's forehead—taken over from goldsmith's work; Comparison with silver 'rhyton' from Mycenae; Parallel fragment of steatite 'rhyton' from Knossos; Bull's head 'rhytons' on inscribed tablet—associated with 'Vapheio' Cups; Both vessels among gifts from Keftiu to Egyptian Viziers; 'Rhytons' in form of animals' heads in Rekhmara Tomb; Minoan artificer with bull's head 'rhyton' in train of Syrian Prince; New evidence from Tomb of User-amon; Sacrificial import of bull's head 'rhytons' -chthonian allusion; Bull's head 'rhyton' of painted clay and other ritual vessels from neighbouring deposit; Leaden figurine of Snake Goddess from Pillar Crypt; Special significance of Pillar Crypts in relation to Earthquakes; 'Little Palace' largely a sanctuary; Have we here 'Expiatory Chapels'? Paved back-yard between 'Little Palace' and Unexplored Mansion—possible bridge between; History of 'Little Palace' repeats later course of greater Building; Partial overthrow at end of L. M. II; Partial reoccupation of Building.

Discovery of 'Little Palace'.

Of the buildings in the neighbourhood of the Palace Site that must be referred to the beginning of the New Era the largest and most important is that which lies some 230 metres distant from it at the foot of the hill to the West and to which the name of 'Little Palace' has been applied. There can be no doubt that it was directly connected with the 'Theatral Area' of

the Great Palace—mainly, it would seem, devised for ceremonial receptions—by means of a paved Minoan Way, the 'Royal Road', to be described below. It was in fact the tracing out of this road-line that led to the discovery of the Little Palace.[1]

That the building in the form in which it has been preserved to us belongs to the great Restoration after the Earthquake that overthrew the earlier M. M. III Palace results not only from the character of the structure itself but, as in other cases, from its ceramic association. A series of sherds extracted from the clay mortar in the interstices of the interior walls proved to belong entirely to the Middle Minoan Class, none of them, so far as could be judged, being later than the date of the Repositories. The bulk of these must be referred to the usual M. M. III *b* seismic stratum. On the other hand there is some evidence of the incorporation in the new work of elements taken over from a pre-existing edifice, going back at least as far as the beginning of the last Middle Minoan Period. Thus the West wall of the first section of the Megaron shows in a patched-up condition the original panelled arrangement of courses of ashlar masonry set within upright posts traversed by horizontal beams that has been noticed in the 'Hall of Double Axes' and elsewhere as an architectural characteristic of the M. M. III *a* Palace.[2] It is also to be observed that, just South of the Central Staircase, is a section of walling belonging apparently to an earlier frontage on that side, consisting of fine gypsum orthostats on a limestone plinth (Fig. 316). A brief return South seems to have connected this short section of wall with a continuation of the same gypsum orthostatic system along the Southern border of the building. The wall that backs it on the West was, on the other hand, of fine limestone masonry.

Belongs to beginning of New Era.

But traces of earlier structures.

Section of early S. façade.

This short section, illustrated in Fig. 316, has now become practically an interior feature, being faced by a small enclosed space, but it is associated with other remains that point to an earlier arrangement, in which it had played a more distinguished part. Its Southern end is marked by a doorway obliquely approached by a causeway, at present cut short after a course of about 6 metres by the projecting basement of the Little Palace in its final shape, but which clearly marks a time when an exterior paved Court had existed here on the ground-level. In the later arrangement this truncated causeway simply served as a short link of connexion between the floor above

[1] *Knossos, Report*, 1905, p. 2 seqq. For further discoveries see *Tomb of the Double Axes, &c., Archaeologia*, lxv, 1914, p. 59 seqq.

[2] *P. of M.*, i, pp. 346–51 and Fig. 251 and cf. p. 350, Fig. 252 (Lower E.-W. Corridor). Remains of similar construction are seen in the Pillar Crypt of the S.E. House.

the basement and a doorway giving on an inner passage. This fragment of orthostatic gypsum façade with its Southern continuation reminds us of that of the Great Palace where it borders the West Court, and demonstrates the survival of an earlier Middle Minoan tradition.

FIG. 316. SECTION OF EARLY FAÇADE OF 'LITTLE PALACE' WITH GYPSUM ORTHOSTATS, AND PAVED CAUSEWAY.

Site and Plan of 'Little Palace'.

Site and plan of 'Little Palace'.

As in the case of the Domestic Quarter and of the Royal Villa, the building is constructed in a cutting in the hill-side, facing the rising sun and protected alike from its hottest rays and from direct exposure to the fierce Northerly and Southerly winds that alternate through many months in this part of Crete. In size it much exceeded the ordinary dimensions of a Minoan private house, being 84 metres in length from North to South. Its original width from East to West cannot be exactly stated, since a part of the Eastern border is clearly wanting, but it probably exceeded a mean distance of 30 metres. It must, in any case, be regarded as something more than an ordinary dwelling-house.

A good idea of the arrangement of the 'Little Palace' is given by Mr. Christian Doll's plan (Fig. 318) as well as by the isometric recon-

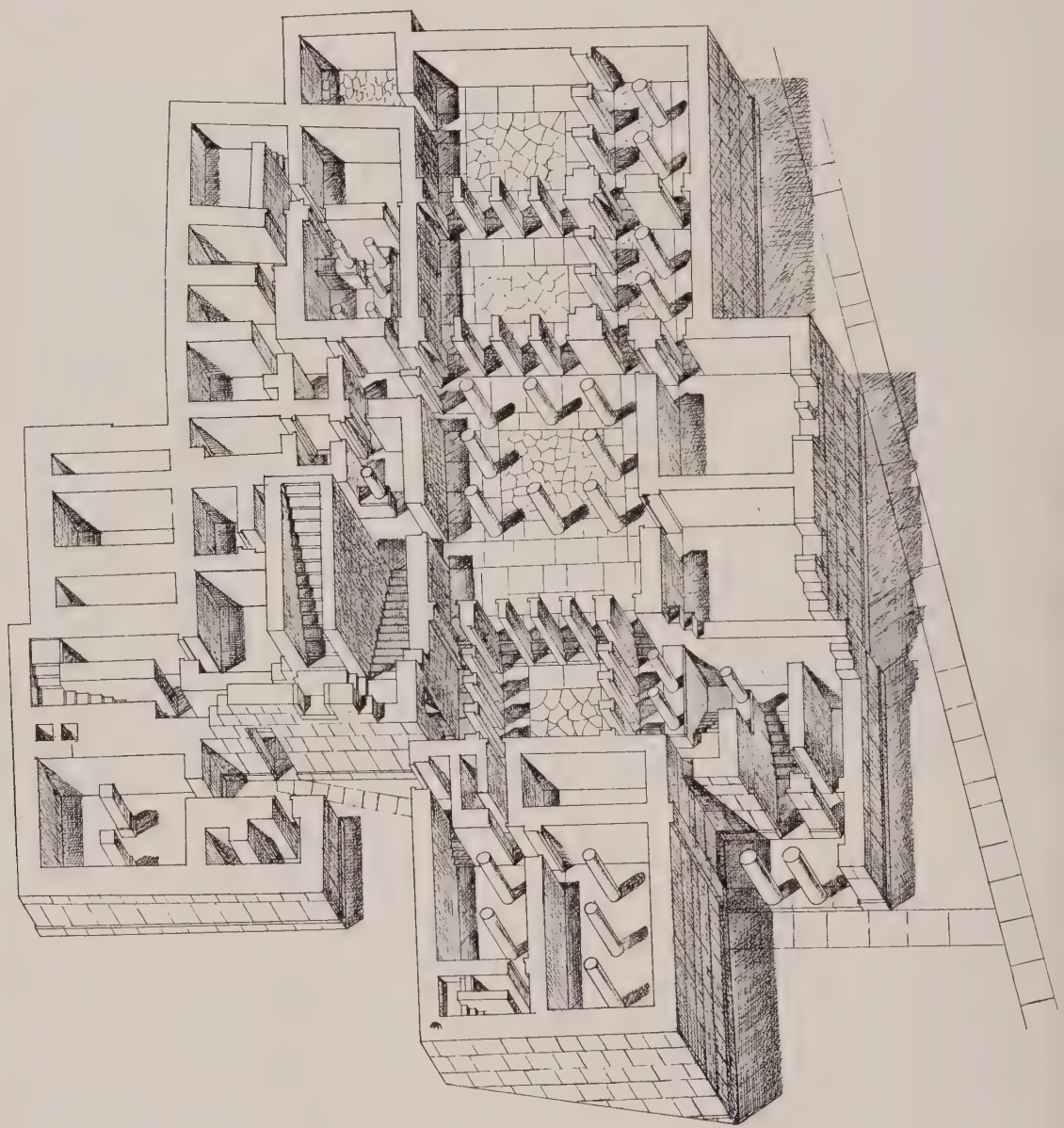


FIG. 317. ISOMETRIC RECONSTRUCTION OF GROUND-PLAN OF 'LITTLE PALACE': THE N.E. ENTRANCE PORCH CONJECTURALLY RESTORED. BY PIET DE JONG.

struction by Mr. Piet de Jong (Fig. 317). In the latter view the entrance system at the South-East Angle is conjecturally restored.

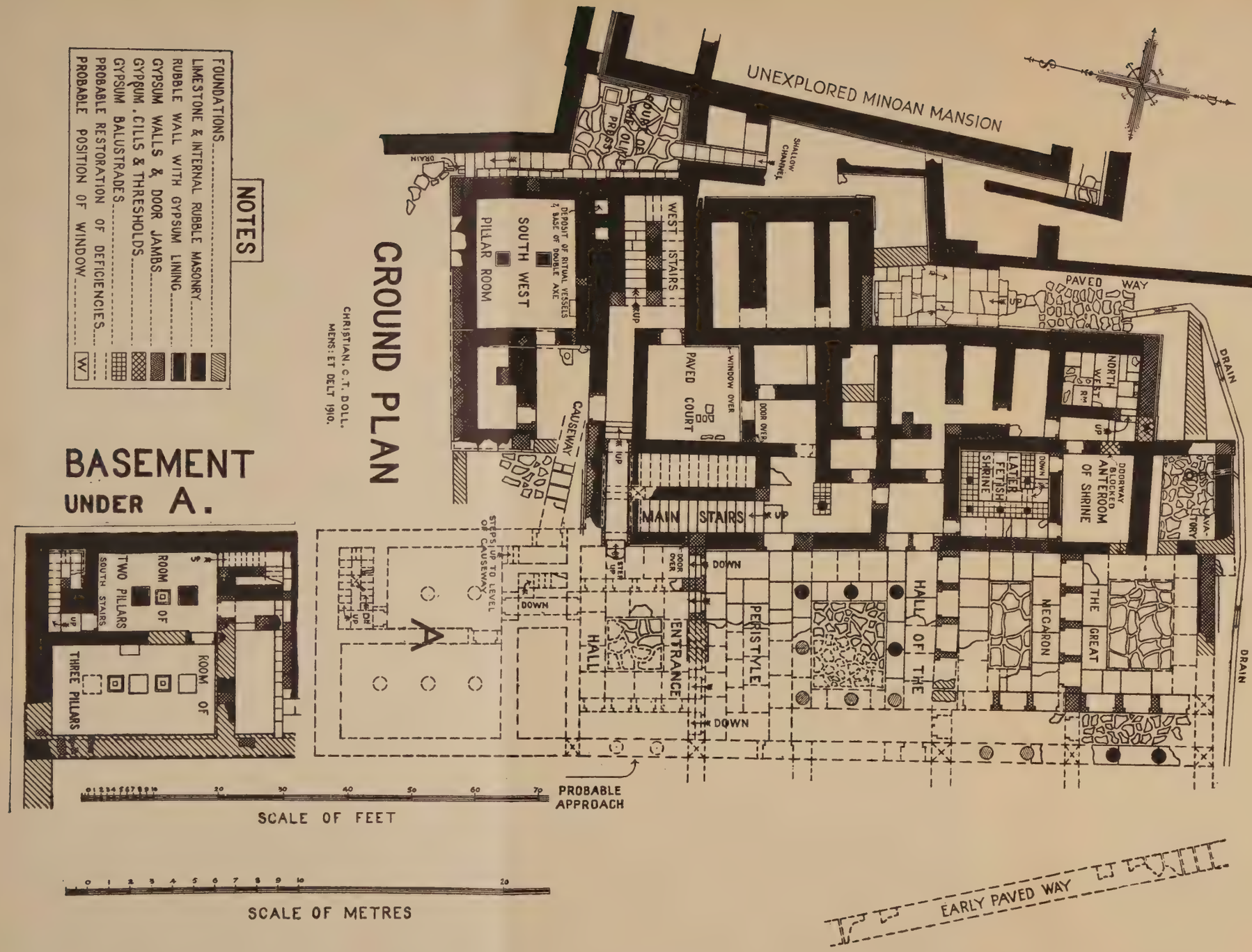


FIG. 318. GROUND PLAN OF 'LITTLE PALACE'. BY CHRISTIAN C. T. DOLL.

Stately Suite of Reception Rooms.

Entrance system.

The approach led to what was evidently an entrance hall with a gypsum pavement surrounding a central rectangle of iron-stone slabs, arranged in the 'mosaiko' manner, and doubtless originally covered with painted plaster. From this entrance hall stepped doorways led to another hall of larger dimensions about 10·75 metres South to North by 8·30 metres wide—and of more imposing design, the central feature of which was a square peristyle with eight columns, the stylobate of which surrounded a similar 'mosaiko' pavement. This 'Hall of the Peristyle' led in turn to the Megaron proper, divided into two sections by door-piers of the usual kind, each with a similar 'mosaiko' panel. Each of these sections opened on the East side through triple doorways into a paved corridor. The outer border of this consisted of a stylobate with two double groups of columns between square piers. Whether this colonnade originally bordered a court on the same level or stood, as now, on a terrace edge is uncertain, since, immediately beyond, this part of site had been made use of by later builders in the Hellenistic Age to construct what may have been a Hêroon, on a lower level.[1]

Peristyle and Megaron.

Magnificent suite of halls.

The two sections of the Megaron were thus lighted from two sides like the East end of the 'Hall of the Double Axes'. Its length was 13·45 metres,[2] or, including the 'Hall of the Peristyle', 24·34 metres—about 78 feet—forming a truly palatial reception room. Taken in connexion with the 'Hall of the Stepped Doorways' through which it was approached, we have here, in fact, a magnificent suite, unrivalled by any other Minoan building, not excepting the Great Palace itself. Its innermost section opened on the left on a smaller room which, from the stone sink visible at its farther end, had clearly served as a lavatory. A conduit ran from the sink to a larger drain outside the wall.

Lobby and main staircase.

The first section of the 'Hall of the Peristyle' opened to the West on a lobby, lit by means of a single-columned balustrade, and small light-well, and giving access to the main staircase, of which two flights of twelve steps each and some remains of a third were preserved, though they had sunken below their original level. West, again, the lobby led through a little passage room into a small square Court, affording light to the surrounding

[1] A small limestone relief representing a riding youth, clad in a chlamys and greeted by a female figure, in a good Hellenistic style was found here, and votive terra-cottas of equestrian and other figures also came to light. A little to the East of this is what appears to be Roman paved causeway stepping up North.

[2] The covered part of this Megaron embraces an area of about 103 square metres as compared with 147 in the case of the 'Hall of the Double Axes'.

structures. Such, more or less central, light-areas are of frequent occurrence in Minoan house-plans, and recall the central open space in the early house at Chamaezi.[1]

The two doorways of the passage room leading to this display an

FIG. 319. DOORWAY IN 'LITTLE PALACE', SHOWING TALL GYPSUM DOOR-JAMBS.

High gypsum door-jambs in place of wood.

interesting particularity shared by some others belonging to the beginning of the New Era, those of the pillar basement of the South House, for instance, and others preserved within the remains of two neighbouring houses of the same date. The jambs are here entirely cut out of upright gypsum blocks (Fig. 319), thus largely dispensing with the usual wood and plaster framework. This may be taken as a sign of the times, when, owing to the great demand for materials caused by the widespread work of rebuilding, the demand for timber exceeded the supply, while gypsum to an inexhaustible amount was at hand in the neighbouring quarries of Gypsàdes. Over and above this exceptional demand, it may also be suspected that we have here a symptom of a growing shortage of timber

[1] *P. of M.*, i, p. 147, Fig. 108.

due to the progressive deforestation of the country. It is to be observed that at this epoch the vertical posts in the walls—very characteristic of Middle Minoan architecture down to the earlier phase of the Third Period,—now begin to disappear. Symptom of timber shortage.

Fig. 320. Sun-dried Bricks: from Upper Story, 'Little Palace'.

In this part of the building there were many sunken remains of upper stories showing sun-dried brick construction, the bricks being about 45 centimetres square and 12 cm. high. In the S.W. Pillar Room there were two stacks of these, evidently brought in for purposes of restoration. An upper wall by the main staircase showed a well-preserved brick in position with parts of others from a collapsed pier above (Fig. 320). Good examples of similar brick structures occurred in the S.E. Magazines of the Great Palace.[1] Crude bricks from upper stories.

Lustral Area with Fluted Columns: re-used as Fetish Shrine.

A double doorway to the West of the inner section of the 'Hall of the Peristyle' gave access to a self-contained and nearly symmetrical system centreing round a sunken area of the lustral type, surrounded by columnar balustrades. The entrance to this, according to the original arrangement, was by a narrow passage with gypsum paving that ran along the farther side of the back wall of the first section of the Megaron. It flanked the Eastern balustrade of the 'lustral area', and must have obtained its light from the openings between the columns. Passing these, it entered, by a second doorway, a kind of ante-room that must have served some ritual purpose. From a doorway in the S.W. corner of this a paved descent led by six steps to the floor of the sunken space, also originally covered with gypsum slabbing. Sunken lustral area.

[1] See A. E., *Knossos, Excavations*, 1905, p. 4, Fig. 1.

Later used as fetish shrine.

This 'lustral area' (see Plan and Section, Figs. 321, 322) was in the Period of Reoccupation used as an actual shrine, and the 'fetish' figures of

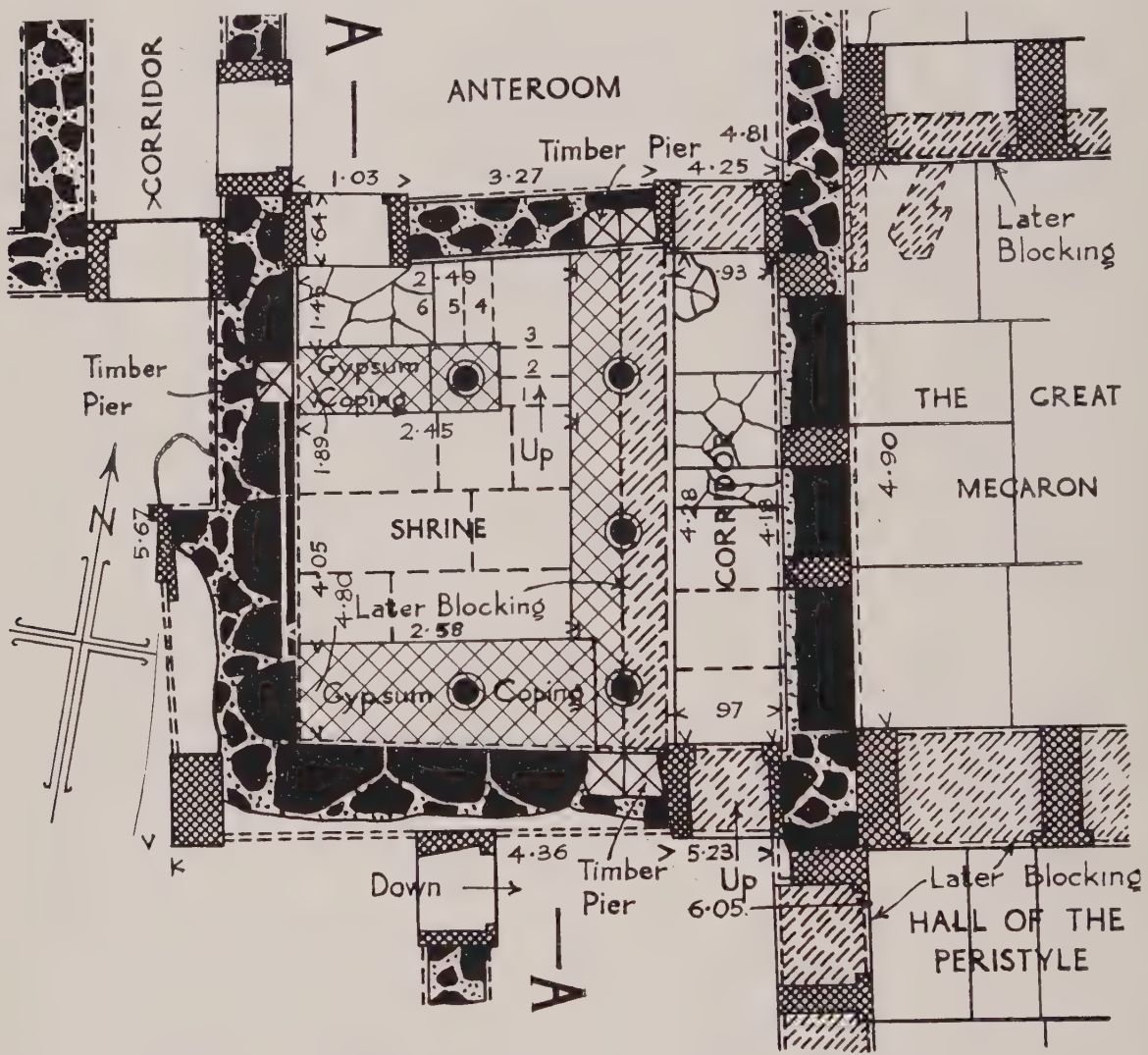


Fig. 321. Plan of Lustral Area of 'Little Palace'. By Christian C. T. Doll.

natural stone found here throw a strange light on what may be termed a recrudescence of Minoan paganism (see above, p. 346, Fig. 198).

The blocking, then carried out, of the spaces between the wooden columns on the side of the small gallery has resulted in the preservation of an interesting record of the character of the columns as set here by the L. M. I builders (Fig. 323). The impressions of the half-columns embedded

in the clay and plaster backing have been to a remarkable extent preserved [1] and show that they were fluted in a convex fashion. According to the observations of Mr. Christian Doll,[2] whose restored elevation is given in Fig. 322, the number of flutings was fifteen (see Section, Fig. 324).[3] This

Impressions of fluted columns.

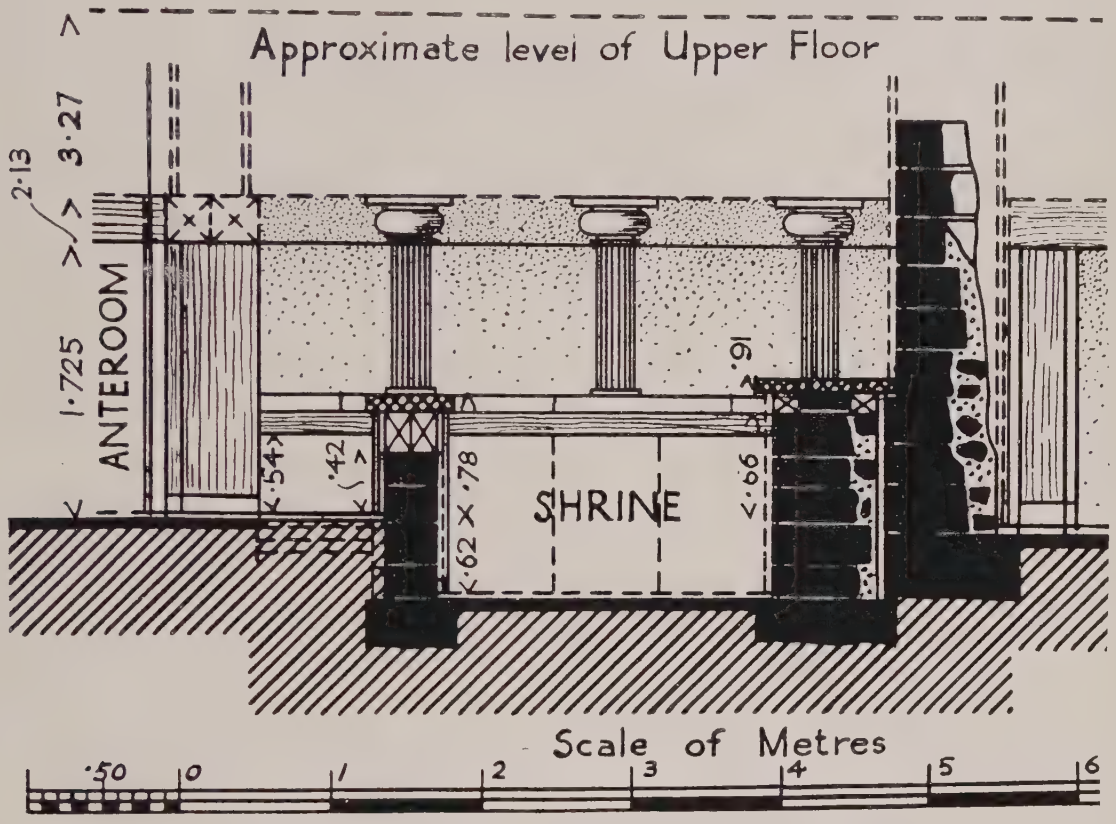


FIG. 322. SECTION SHOWING ELEVATION OF SUNKEN (LUSTRAL) AREA (LATER 'FETISH SHRINE'). BY CHRISTIAN C. T. DOLL.

was clearly taken over from the Egyptian columns imitating clustered papyrus and lotus stems tied together round a post. A portion of a pedestalled lamp found in a chamber North of the Central Court of the Knossian Palace, belonging to the same epoch, supplies an interesting illustration of similar architectonic influences (Fig. 325). The section here is

[1] See A. E., *Pillar Rooms, &c., of the Little Palace, Archaeologia*, 1914, p. 62, Fig 76.

[2] See *ibid.*, p. 63, Fig. 77.

[3] The impressions on the clay backing suggest that the columns tapered towards their base, but Mr. Doll's measurements have led him to the conclusion that the diameter of the shafts was uniform.

Stone lamp on quatrefoil pedestal—

quatrefoil, representing a group of four stems, and above this rises a kind of double capital, the lower with somewhat truncated buds, while that above is an elegant Minoan adaptation of papyrus foliage. The quatrefoil section, here coupled with truncated buds, closely recalls the columns of some of the

FIG. 323. IMPRESSIONS OF COLUMNS IN 'LUSTRAL AREA', 'LITTLE PALACE', SHOWING CONCLAVE FLUTINGS.

Egyptian architectonic type.

Twelfth Dynasty graves at Beni Hasan,[1] and the compound form of the capital is also characteristically Egyptian.

There can be no question but that the whole of the sunken area of the Little Palace was paved over like other analogous spaces,[2] such as that annexed to the Room of the Throne and of the 'Northern Lustral Basin'

[1] Compare, for example, the specimen given by Dr. Borchardt, *Die ägyptische Pflanzensäule*, p. 7, Fig. 10, from a sketch of a column of Grave 17 in Lepsius's *Tagebuch*.

[2] See Mr. Christian Doll's plan, Fig. 321. In the present case the paving had either decayed away or been removed in the course of later changes. But there was no trace of the alternative system of cement paving (accompanied by a drain) which characterized the Minoan light-wells.

described above. This fact distinguishes all such areas from the ordinary light-wells of Minoan buildings, which were open to the sky and were always provided with cement paving. Gypsum slabbing, on the other hand, is regularly placed in covered spaces, and we must therefore infer that these sunken areas were either entirely roofed in, or at all events provided with a clerestory. It is, anyhow, clear that in this case some means of lighting the area itself was provided, since the corridor to the East also received its light from it. The conclusion that there was some kind of structural lantern above seems therefore to be inevitable.

Sunken Area of Little

Fig. 324. Section of Restored Column of 'Lustral Area'. Christian C. T. Doll.

Fig. 325. Architectonic Stone Lamps with Quatrefoil Pedestal.

The connexion of the sunken area here from the first with religious functions is illustrated by the discovery, within it and in the immediately bordering spaces, of fragmentary sealings depicting scenes of worship. One of these shows part of a pillar shrine and of an adorant (Fig. 326), two others present confronted lions with their forefeet resting in the one case on an altar-base, in the other on a pile of rocks, symbolic of a mountain peak—

Palace, as elsewhere roofed over.

Clay sealings with religious types.

the whole set upon an entablature (Fig. 327). They recall another, with confronted lions, on a series of sealings found in the central shrine of the Great Palace, illustrating the cult of the Minoan Rhea.[1] On another sealing two doves are seen perched on an altar-base. Several fragments referred to the *taurokathapsia*.

The clay sealings were in all cases fragmentary and had doubtless been broken from documents or caskets. A great variety of these, derived

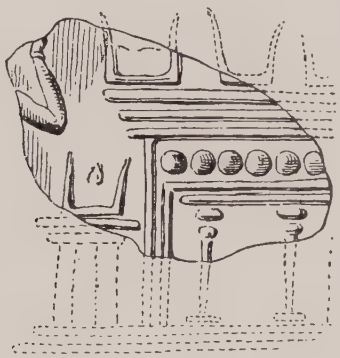


FIG. 326. CLAY SEAL-IMPRESSION SHOWING PART OF SHRINE AND ADORANT.

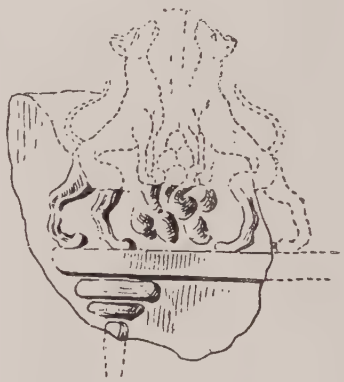


FIG. 327. CLAY SEAL-IMPRESSION: CONFRONTED LIONS.

from upper chambers of this and the adjoining part of the building, came to light, among them the remarkable specimen described above exhibiting a thoroughbred horse on a ship.[2]

Anteroom and dependencies of Lustral Area.

Two doorways, one of which was subsequently blocked, led from the Anteroom of the Lustral Area into a short passage with steps leading up to a little paved room at the North-West angle of the building. Within this passage, lit at its Northern end by a small window of which the gypsum sill remained, were found fragments of painted stucco, showing black spirals on a white ground with lozenge-shaped intervals banded red and yellow.[3] The fragments probably belonged to this 'North-West Room', the walls of which still show a good deal of the coarser backing of a fresco surface adhering to them. This little chamber, which might be compared to a 'lustral area' with a stepped entrance going up instead of down, has every

[1] See A.E., *Knossos, Report* (*B. S. A.*), 1900, p. 29, Fig. 9. To be described in a later Section of this work.

[2] P. 244, Fig 141, *a*.

[3] Some inferior fragments were also found here showing degenerate papyrus decoration, and perhaps belonging to the period of Re-occupation: no other remains of wall-painting except of the most fragmentary kind were found in the building.

appearance of having had a ritual destination. The greater part of its floor is paved with gypsum slabs after the manner generally prevalent, except for central panels, from the beginning of the New Era, but near its Southern wall are remains of iron-stone flags belonging to the earlier 'mosaiko' system made use of for entire floors. The passage of approach, in addition to its means of communication with the Ante-room of the Lustral Area, had another door at its South end. It could thus be entirely shut off from the other part of the system.

Looked at with reference to the general plan, this little room occupies a prominent position at the corner of the paved yard that runs along the back of the building. Its North wall, which overlooks the entrance to this, is formed of gypsum blocks.

Succession of Pillar Crypts across the whole Southern Section.

Deep basements with pillar crypts.

At the other end of the system, the 'Hall of the Stepped Doorways' communicated beyond with an oblong section of the building (A) which, as noted above, has the appearance of an annexe to the original plan. It had crypts below, the two principal spaces of which contained respectively two and three pillars (Fig. 328).[1] Between the pillars were the usual stone vats for the reception of liquid offerings.[2] The first of these crypts—that with the two stone pillars—opened into what may have been a sacristry chamber at its North-East corner, and was, curiously enough, provided with a small staircase at either end. The staircase at the South end afforded the necessary access to upper halls with a columnar arrangement answering to that of the pillars below, such as we meet with in the Great Palace and elsewhere, and which would have been used for religious services of a more public character. The staircase at the North end, on the other hand, probably served as a link between the lower Sacristy and a corresponding upper chamber that may have been used as a temple treasury of a more accessible kind. To this superposition again a close parallel is found in the relation of what seems to have been a temple treasury adjoining the central hall of the West wing of the Great Palace to the enclosed space below, which was at first known as the 'Room of the Stone Vases'.[3] We shall see that in the

Corresponding upper halls.

[1] Only the foundations of the three pillars in the second crypt were preserved.

[2] The elaborate arrangement of those of the Royal Villa are described above (pp. 406–8). The two pillars of the first crypt had only a single vat, placed between them. There had been originally three between the pillars of the second crypt.

[3] See below, p. 820. In that case it seems probable that the upper treasury communicated with the lower by means of wooden steps.

FIG. 328. BASEMENT CHAMBERS OF 'LITTLE PALACE' SHOWING STONE VATS BESIDE PILLARS.

South-West Quarter of the 'Little Palace' itself there is evidence of the existence of a similar upper 'Treasury' associated with a Pillar Crypt, from which one of the greatest artistic treasures found in the whole course of the excavation was derived—the magnificent bull's head 'rhyton'.

Pillar crypt in S.W. angle.

The multiple evidences of the cult of stone pillars and their columnar equivalents presented by this 'Annexe' are further supplemented by the parallel remains that occupy a large part of the adjoining section of the building. Its South-West corner includes another crypt with two pillars[1] and a small staircase flanking this—the West Stairs of the Plan—would have given access to an overlying bi-columnar chamber, as to the religious character of which some remarkable evidence has been preserved.

Discovery of the Bull's Head 'Rhyton' and other Ritual Objects.

Double Axe stand and bull's head 'rhyton' from chamber above.

Clearly derived from this upper chamber or some small repository on its border, and lying partly on the stairs and partly contained in a small stone shaft or walled pit, beside them, a series of cult objects came to light. The earlier group of these consisted of a fragment of a socketed black steatite stand, of the usual stepped form, for a sacred Double Axe, resembling specimens found in the Diktaean Cave,[2] and the greater part of an exceptionally large libation vase or 'rhyton' of the same material in the form of a bull's head and magnificently inlaid (Fig. 330).[3] It was cut and hollowed out of a solid piece of the same dark steatite that was used at the period to which it belongs for oval and funnel-shaped vessels of the same ritual class, and had a hole on the top of the neck for the pouring in of liquids and a smaller perforation in the lower lip through which they could slowly trickle out (see Section, Fig. 332, *b*). The base was formed by a flat plate of the same soft stone, on which the artist has made a *graffito* sketch of the bull's head (Fig. 329), valuable for giving the spring of the horns. These consisted apparently of wood, covered with gold foil, which had not been preserved. Their sockets show that they were secured

Fig. 329. *Graffito* Sketch of Bull's Head by the Artist on Base of 'Rhyton'.

The inlaid steatite 'rhyton'.

[1] These were formed of blocks about 65 cm. square resting on bases.

[2] Cf. *P. of M.*, i, p. 438, Fig. 315.

[3] For further illustration and details of the fabric, see A. E., *Archaeologia*, lxv (1914), p. 79 seqq. The height of the head from the mouth to the crown is 20·6 cm.; from the bottom of the neck to the crown, 30·6 cm.

FIG. 330. 'RHYTON' OF INLAID BLACK STEATITE FROM 'LITTLE PALACE' (HORNS AND PART OF LEFT SIDE OF HEAD RESTORED).

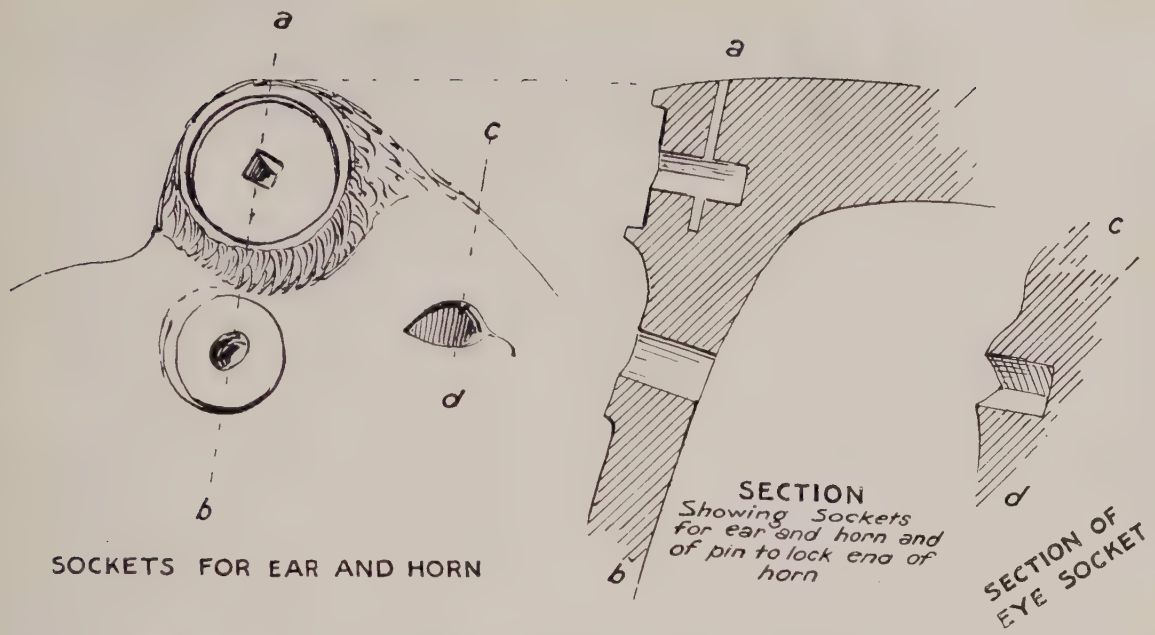


FIG. 331. SECTIONS OF PARTS OF BULL'S HEAD SHOWING SOCKETS FOR ATTACHMENT OF EAR AND HORN, AND EYE SOCKET.

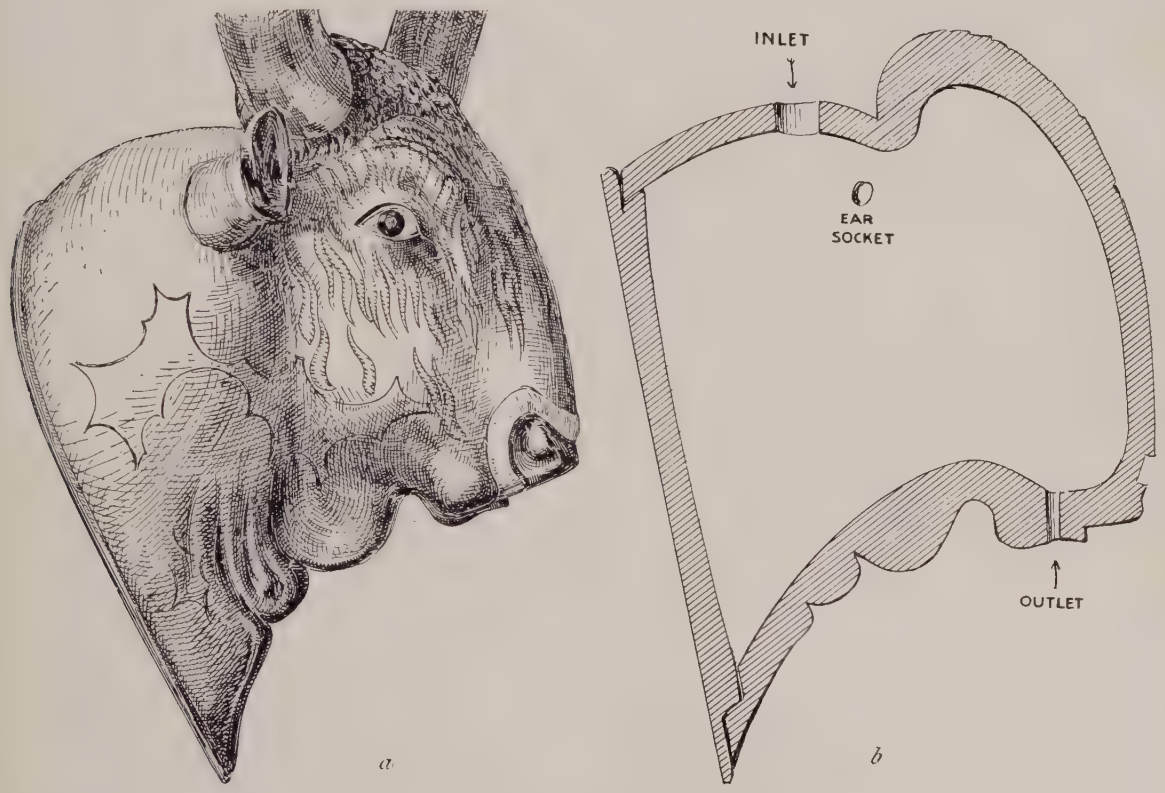


FIG. 332. *a*, VIEW SHOWING RIGHT SIDE OF BULL'S HEAD 'RHYTON'; *b*, SECTION OF HEAD. ($\frac{1}{3}$)

Attachments of horns and ears.

by a metal pin that passed through a square projection at their base, a method similar to that by which the wooden bars of the South House cellar were locked.[1] The ears were more simply attached by a short stem that passed through the side of the head.

Crystal eye with painted pupil and iris.

The white inlay that curves round the nostrils seems to be of *Tridachna* shell, the importation of which from the Persian Gulf goes back in Crete to the borders of the Neolithic Period.[2] But the most beautiful decorative feature of the head was the perfectly preserved right eye. The lens of this consisted of rock crystal, on the slightly hollowed lower surface of which are painted the pupil and iris. The pupil is bright scarlet, the iris black, the rest of the cornea white. The crystal setting is itself inserted in a border of red jasper, which surrounds the white field of the eye like the rims of blood-shot eyelids. To add to the effect, the crystal lens of the eye both illuminates and magnifies the pupil and imparts to the whole an almost startling impression of fiery life.

Rayed 'medallion' over forehead.

A fine natural touch is supplied by the long hairs falling about the forehead, brows, and cheeks of the animal, and showing that he was of shaggy breed. His spots are indicated by incurved and angular patches, that over the forehead somewhat recalling the shield of the Minoan 'Palladium'.[3]

Taken over from goldsmith's work.

The small medallions with revolving rays set between the horns and on the upper part of the forehead are themselves decorative features that have a very interesting bearing on the history of this object as a work of art. They are clearly taken over from metal technique and indeed recall the revolving ornament on the studs of a fine gold-plated sword from the Knossian Cemetery of Zafer Papoura.[4] But the best commentary is supplied by the rosette formed of gold plate attached to the forehead of the silver bull's head 'rhyton'[5] from the Fourth Shaft Grave at Mycenae (Fig. 333). The ornament there appears in its true guise as a decorative adjunct to a masterpiece of delicately modelled and engraved metal-work, with the effect of which it really interfered.

Comparison with silver 'rhyton' from Mycenae.

[1] See above, p. 384, Fig. 218. The locking with pins of the horns of similar 'rhytons' from Mycenae has since been excellently illustrated by Mr. A. J. B. Wace (*B. S. A.*, xxiv, p. 202 seqq. and Pl. XIII). In one case two pins were used.

[2] See above, p. 46.

[3] Dr. G. Karo, *Minoische Rhyta*, p. 252, observes that the figure 'am ehesten an Minoische "Palladien", aber mit spitzen Ecken erinnert: doch wohl ein religiöses Symbol.'

[4] A. E., *The Tombs of Knossos*, i (*Archaeologia*, vol. lix), p. 62, Fig. 66.

[5] At one time supposed from the analogy of certain votive bulls' heads to have had the shaft of a Double Axe socketed between the horns. See Dr. G. Karo, *Minoische Rhyta* (*Jahrb. d. K. D. Arch. Inst.*, xxvi, 1911, p. 249 seqq.), to whom the best account of this masterpiece is due.

This splendid piece of toreutic work, the full beauty of which was only revealed by careful supplementary cleaning in the Athens Museum, is here reproduced (Figs. 333, 334) for comparison with the steatite example. The horns are of gold plate, and the gold inlay round the nozzle supplies a further parallel with the 'rhyton' from the 'Little Palace'. The locks of the upper part of the head as now brought out show their artistic arrangement in a great fidelity to Nature, and 'recall the treatment of the hair in the Age of Myron'. The steatite head, on the other hand, betrays a certain amount of conventional regularity in the disposal of the locks and, unique as it is in its technique of inlaid stone-work, and wonderful as is its execution in many ways, it must, so far as it is regarded from the point of view of greater art, be placed in a secondary position when compared with the silver 'rhyton' from the Shaft Grave. In the light of our present knowledge the Mycenae relic must be recognized as Minoan work, doubtless of the Knossian palatial school, belonging to the earlier stage of the Third Middle Minoan Period. The steatite specimen, though standing in a close relation to the other, should rather be attributed to the beginning of L. M. I.

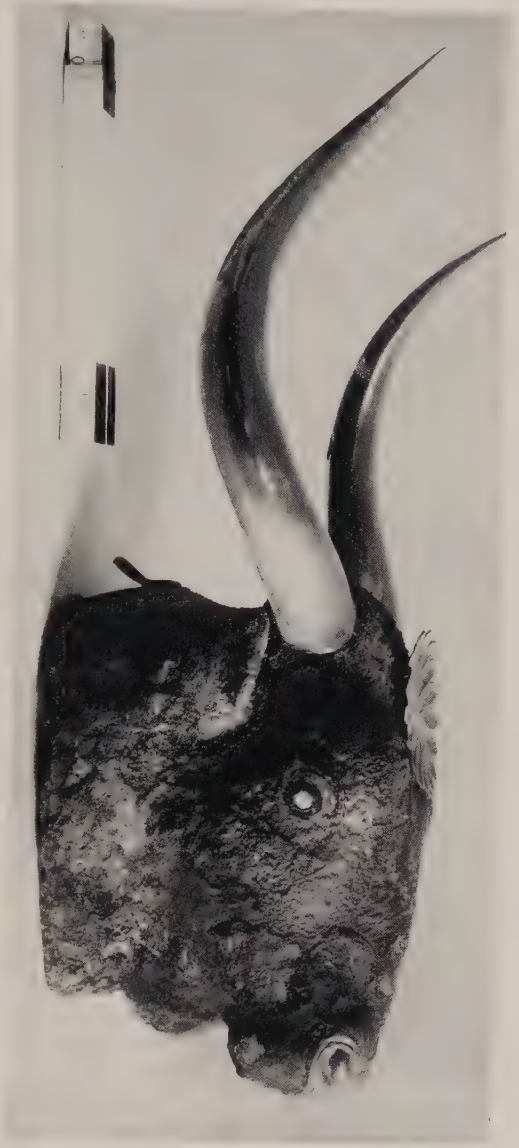


FIG. 333. SILVER 'RHYTON' IN FORM OF A BULL'S HEAD WITH GOLD ROSETTE ON FOREHEAD. FROM FOURTH SHAFT GRAVE, MYCENAE.

Its connexion with the Little Palace itself makes a higher dating in itself improbable, and the discovery of a small fragment of a bull's head 'rhyton' of dark grey steatite, showing a similar attachment for a horn and

Fig. 334. Silver Bull's Head 'Rhyton' from Fourth Shaft Grave, Mycenae, seen from Above showing Fine Modelling of Hair. The Edge of the Attached Gold Rosette is visible Above.

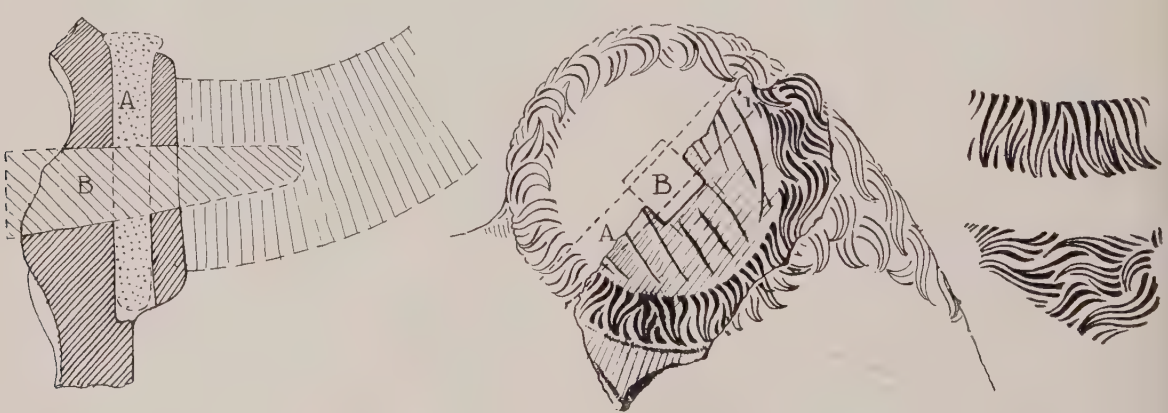


Fig. 335. Part of Bull's Head 'Rhyton' from Drain by 'Royal Road', showing Similar Attachments and the Same Treatment of the Hair as that from the 'Little Palace'. ($\frac{1}{1}$)

locks of hair in identical style, has now supplied a still closer chronological guide. This was found in a drain beneath the South border of the 'Royal Road', in company with some M. M. III *b* sherds, but also of one of L. M. I *a* fabric.[1] This and the companion piece may therefore with great probability be referred to the earlier phase of the First Late Minoan Period.

Parallel fragment of steatite 'rhyton' from Knossos.

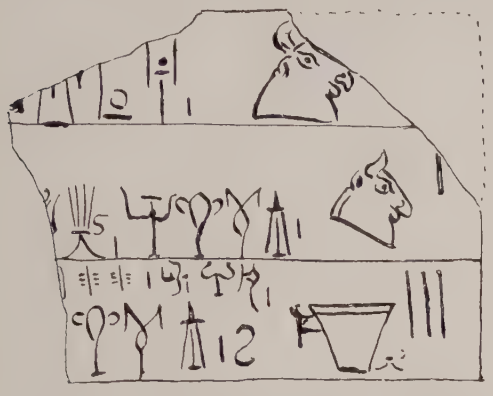


FIG. 336. INSCRIBED TABLET OF CLASS B FROM PALACE, KNOSSOS, SHOWING BULL'S HEAD 'RHYTONS' AND VAPHEIO CUP.

That at Knossos, as was to be expected, the prototypes in precious metal existed—of which, indeed, that from the Shaft Grave may be safely regarded as an exported example—appears from some interesting evidence supplied by an inscribed clay tablet found in the Palace. The tablet itself, (Fig. 336), from its superior baking, characteristic of the clay documents of the earlier script, can fairly claim to be one of the most ancient records that we possess of the Linear Class B. Like most of the tablets preserved in the Palace archives, it is of the nature of an inventory, in this case referring to precious vessels.[2] Above an entry concerning cups of the typical Vapheio shape, the vogue of which seems to have been mainly confined to M. M. III and L. M. I, are two others, followed by what from their association must be identified with 'rhytons' like the above, in the form of bull's heads. In the second line this representation is coupled with a cypher signifying 'one' according to its Minoan numeration, though a fracture in the tablet has removed the number that succeeded the larger head in the first line. The cup of 'Vapheio' type in the third line has a numerical sign = 3 attached to it. It is observable that the triple group of signs that precedes the bull's head 'rhyton' on the second line recurs before the cup on the line below. The facing head sign that here appears is also seen preceding what has been already identified as a lion's head 'rhyton' on a sealing of M. M. III type from the North-East House. It may be the mark of some particular Treasury official. In both cases the pictorial sign gives a very neat characterization of the profile head of the animal.

Bull's head 'rhytons' in precious metal on inscribed tablet.

Associated with 'Vapheio' cups.

This collocation of the bull's head 'rhytons' and the 'Vapheio' Cup has

[1] There were several sherds of the usual M. M. III *b* class. The solitary L. M. I *a* specimen showed the grass or reed decoration.

[2] See A. E., *Scripta Minoa*, i, p. 32, Fig. 28, and cf. *Corolla Numismatica*, p. 353 (Fig. 8). My original view that the heads were weights

Both vessels among gifts of Keftiu chiefs to Egyptian viziers.

itself a special interest, since these vessels were among the most characteristic objects brought to Egypt by the men of Keftiu and of the Isles of the Sea who bore the artistic fabrics of Minoan artificers as tributary gifts to the 'Viziers' and high officers of Eighteenth Dynasty Pharaohs. Beside the

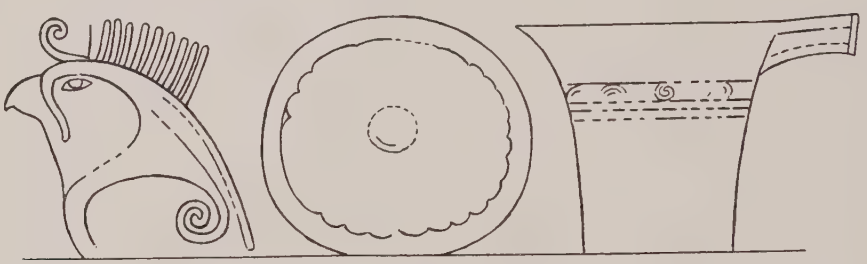


FIG. 337. MINOAN OFFERINGS: TOMB OF USER-AMON. FROM SKETCHES BY MRS. N. DE GARIS DAVIES.

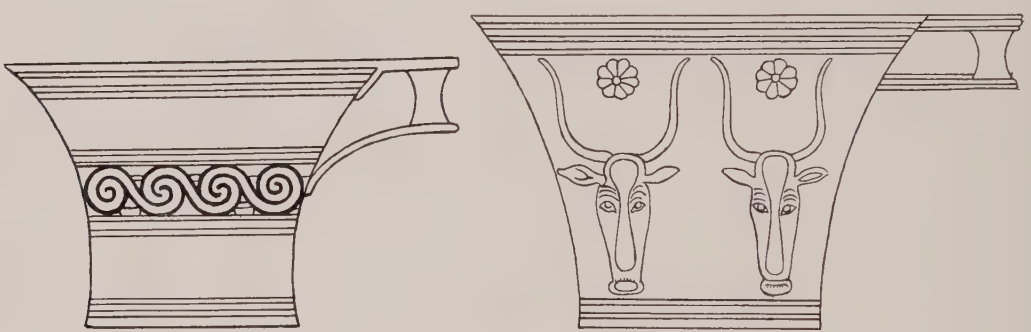


FIG. 338. 'VAPHEIO' CUPS; FROM SENMUT'S TOMB (MRS. N. DE GARIS DAVIES).

bull's head 'rhytons' are others in the shape of the heads of lions, griffins, ibexes, and jackals or dogs, and cups of the Vapheio type appear, as on the Knossian tablet, in the same association. Two of these from Senmut's Tomb are reproduced in Fig. 338. Though faithfully rendered by the Egyptian artist they had been disproportionately enlarged. Another similar cup from the more recently illustrated tomb of the Vizier User-amon, also of the earlier part of the reign of Thothmes III, is given in Fig. 337.

A good idea of the 'rhytons' in the shape of animal's heads included in the tributary gifts may be gathered from a group of objects taken from the wall-paintings of Rekhmara's Tomb (Fig. 339).[1] Here the bull's head

was rightly corrected by Prof. G. Karo, *Minoische Rhyta* (*Jahrb. d. d. Arch. Inst.*, xxvi, 1911, p. 265).

[1] Drawn by Professor P. E. Newberry (from an unpublished plate kindly supplied to me by him). Some types of vessels brought by the emissaries from Keftiu seen in the Tomb of Rekhmara, Grand Vizier of Thothmes III from *c.* 1471 B. C., appear already among the more recently published wall-paintings in the tomb

'rhyton' is placed above three ingots of the usual Minoan form as represented on the Knossian tablets and by the actual bronze examples from Hagia Triada and elsewhere.

'Rhytons' in form of animals in Rekhmara's tomb.

Of the greatest interest in connexion with the bull's head 'rhytons' of Minoan fabric is the appearance of one in the hand of a Cretan envoy de-

FIG. 339. 'RHYTONS', INGOTS, AND VASES AMONG OFFERINGS OF MEN OF KEFTIU FROM TOMB OF REKHMARA (P. E. NEWBERRY).

picted in the tomb of the Vizier User-amon (Fig. 340, *a*).[1] He has a long lock of hair falling down behind and wears the native loin-clothing, including the characteristic Cretan equivalent of the 'Libyan sheath', as rendered by the Egyptian artist. His sandals and puttees are also of the Minoan type. But the offertory figure here represented at once recalls a somewhat later type that appears on the wall of the tomb of Men-kheper'ra-senb,[2] the son of Rekhmara. The suppliant figures of the Princes of Keftiu,[3] Khatti, and Tunep are there followed by a train of youths clad in Egyptian versions of

Minoan artificer with bull's head 'rhyton'.

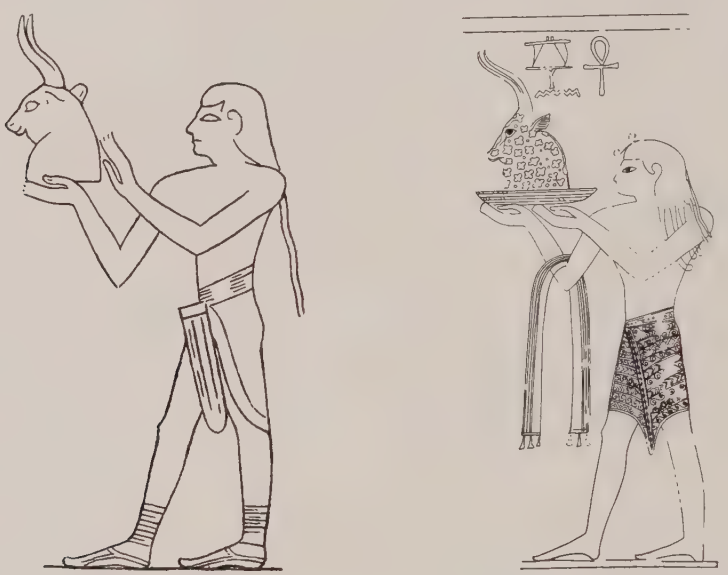
of his uncle, and predecessor in the office, User-amon (see N. de G. Davies, *Bull. Metr. Mus. N. Y.*, 1926, p. 49, Fig. 6).

[1] See p. 738.

[2] See p. 745 seqq.

[3] Owing to some confusion on the part of the artist the first figure labelled 'Princes of Keftiu' is depicted as a yellow Asiatic (cf. W. Max Müller, *Eg. Researches*, ii (1906), p. 19, who describes it as a 'Bedawin type'). Virey, *Sept Tombeaux Thébains* (*Mission Arch. française au Caire*), Pl. I, pp. 202, 203, substituted a goat's head for the bull's and mis-copied the inscription as *se-ankh*, 'he that makes alive', which thus appeared to be a description of the Minoan artist. This garbled version was copied by Petrie, *Hist. of Egypt*, ii, p. 109, Fig. 52, and taken over by Fimmen (*Kret. Myk. Kultur*, second ed., p. 183). The signs—of which the first—the sail = 'breath'—was misread, and the second omitted—are really, as Prof. F. Ll. Griffith informs me, the concluding part of the previous inscription—'in order that there may be given to them' (the tributary princes) 'the breath of life'.

the Minoan kilt such as we see it in the 'Procession Fresco'. The first of these holds on a tray what is clearly a silver 'rhyton' in the shape of a bull's head, the spots being rendered by black, cruciform inlays like those of the steatite 'rhyton' from the Tomb of the Double Axes at Knossos.[1] The second tributary holds on a plaited tray a small finely executed figure of a standing bull—from its white colour apparently of silver—belonging



a *b*

FIG. 340. MINOAN ENVOYS CARRYING BULL'S HEAD 'RHYTONS': *a*, FROM TOMB OF USER-AMON; *b*, FROM TOMB OF MEN-KHEPER'RA-SENB.

to a class of Minoan masterpieces in toreutic work of which more will be said below.[2]

In a fragment of Annals, a Northern land, which can hardly be other than Minoan Crete, is first mentioned as presenting vessels in the form of ox-heads and other precious gifts, including copper; and reference is next made to a prince of . . . *n-ti-na-y* with a silver *sha-va-b-ti* vase of 'Keftiu work'.[3]

Something has already been said of the parallel class of lion's head 'rhytons' also illustrated on these Egyptian monuments, and of which a magnificent silver example found its way to the Fourth Shaft Grave at Mycenae. These seem to have been a special palatial fabric at Knossos, of

[1] A. E., *The Tomb of the Double Axes, &c.* (*Archaeologia*, lxv), p. 52, Fig. 70. For the connexion between the cruciform inlays and the 'star' symbols of the Hathoric cow see *P. of M.*, i, pp. 513, 514, Fig. 370.

[2] See below, p. 648 seqq. and Figs. 413, 416.

[3] Lepsius, *Denkmäler*, xxx a, 18 (cf. W. Max Müller, *Asien und Europa*, p. 338).

which we have not only a record in an inscribed sealing of M. M. III *b* date,[1] but an actual specimen, as translated into alabaster, from the Treasury of the Restored Palace.[2]

The smaller *protomê* of a wild-goat's head seen above the metal jar on the left in the group of objects from the Rekhmara Tomb (Fig. 339) may not be itself another 'rhyton', but it supplies a certain analogy with the unique painted vessel of that class, of L. M. I *a* date, from Palaikastro, belonging to the pear-shaped category and with the curving horns of the *agrimi* used as a handle (Fig. 341). A curious relief on a fragment of grey steatite, no doubt belonging to a 'rhyton', found North of the Palace site, shows a huge Cretan wild-goat dragged, probably to the sacrifice, by a sturdy youth—a display of physical strength which may be best considered in connexion with the bull-grappling sports to be described below.

Fig. 341. 'Rhyton' with Goat's Head Handle, Palaikastro (L. M. I *a*).

New evidence from tomb of User-amon.

It may be gathered from the evidence supplied by the Tombs of Senmut and of User-amon as compared with the later works associated with Rekhmara and his son Men-kheper'ra-senb, that many of the offertory vessels depicted on the sepulchral chamber of their successors are really repetitions of the earlier types, much as the trophies of the later Roman Empire derive from the barbarian spoils of Julius or Trajan. In the present case not a few of the prototypes were inherited at least from the latter part of the sixteenth century B. C. In particular it has been already shown [3] that a bronze vessel borne by a Minoan envoy depicted in the Senmut Tomb corresponds with a form of 'pithoid amphora' that goes well back into the L. M. I Period.

It must nevertheless be observed, however, that, so far as such finds are known, the Minoan painted vases found in Egypt in deposits of XVIIIth Dynasty date, several examples of which have been cited above, consistently belong to the L. M. I *b* phase, which would have corresponded very nearly with the reign of Thothmes III (1503–1449 B.C.). They belong in fact to the same age as the wall-paintings of the tombs showing the offerings of the men of Keftiu to Pharaoh's high officers. These certainly, in nearly all

[1] See above, p. 420, Fig. 242, *b*.

[2] See below, p. 830, Figs. 544, 545.

[3] See above, pp. 425, 426.

cases, referred to metal objects, but the clay vessels found in ordinary graves would have reached the Nile Valley by the ordinary course of trade. There is as yet no evidence of any such import into Egypt, either on the part of Crete or of Mainland Greece during the last Palace Period of Knossos, answering to the Second Late Minoan Period. This remarkable lacuna may be of historical significance.

'Rhytons' in the form of whole bulls have been traced back to early Sumerian prototypes.[1] Clay vessels consisting of the bull's head only were

a 1 *a* 2 *b*

FIG. 342. *a*, BULL'S HEAD 'RHYTON' OF PAINTED CLAY; *b*, *ARYBALLOS* WITH OCTOPUS DESIGN. FROM VOTIVE DEPOSIT, 'LITTLE PALACE' (L. M. II).

Chthonian import of bull's head 'rhytons'.

in vogue in North Syria and its borderlands at a much later date,[2] but it looks as if the real source of this type of 'rhyton' must be sought in Minoan Crete. This form of ritual libation vase, naturally connected with sacrificial bulls, is specially appropriate to the Chthonian aspect of Minoan religion. If, as was the case elsewhere,[3] earthquakes were attributed in Crete, too, by primitive belief to the tossing of a mighty bull below, it was also quite fitting, when the control of the Underworld had passed to an anthropomorphic divinity, that the ritual vessel should take this form.

Bull's head 'rhyton' of painted clay and other

In a basement space below, and derived from an upper chamber, immediately North of the staircase area with the cavity where the steatite

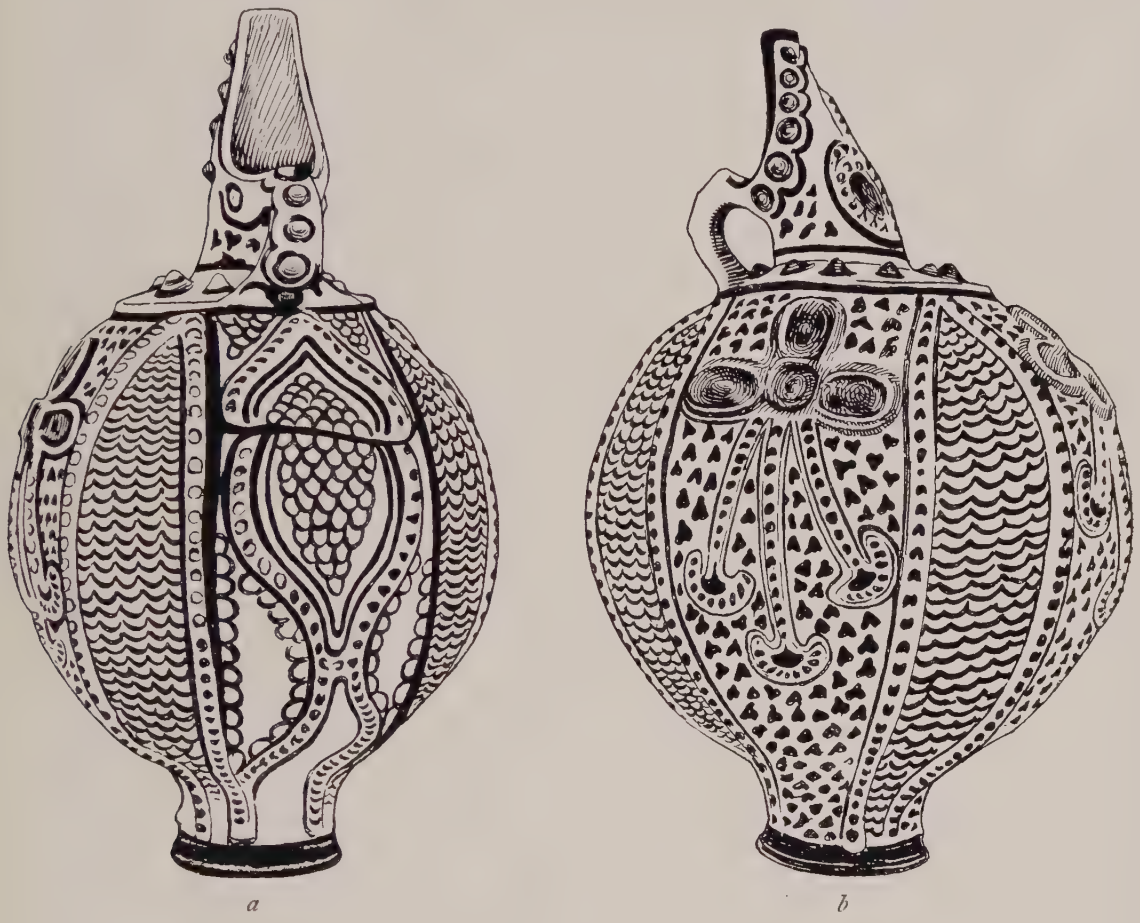
[1] See above, pp. 260–4 and Figs. 156, 157.

[2] E. g. the bull's head 'rhyton' from near Ain Tab (A. E., *Archaeologia*, lxv, p. 94, Fig. 97). Other examples are in the Louvre and the Ashmolean Museum and a remarkable class from Pontus bears unmistakable evidence, as is shown below (pp. 658, 659 and Fig. 422), of having been imitated from L. M. I *b* 'rhytons' presenting the characteristic 'Sacral Ivy' decoration.

[3] See above, pp. 324, 325.

relics lay, there came to light remains of vessels illustrating the same cult at a slightly later stage.[1] Here were the remains of a bull's head 'rhyton' in painted clay (Fig. 342, *a*) of somewhat gross fabric belonging to the close of the Last Palace Period (L. M. II *b*). With it was a clay *alabastron* with three

ritual vessels from neighbouring chamber.



a *b*

Fig. 343. Ritual Vessel from 'Little Palace'.

handles, and the higher handleless specimen (Fig. 342, *b*) showing the 'marine style' such as is illustrated above, but with a slightly decadent version of an octopus. For a fine L. M. I *a* painted example from Gournià, see Fig. 346.

Near these, but apparently of earlier fabric, was the remarkable ewer (Fig. 343, *a*, *b*) with painted reliefs showing triple pendent bunches of papyrus and waved imitations of water taken from an Egyptian model.[2] The recurved neck and spout of the vessel is more in harmony with Cycladic

[1] *Archaeologia*, *loc. cit.*, pp. 87–9 and Figs. 93–5.

[2] *Ibid.*, pp. 77–8 and Fig. 86.

tradition such as is represented by the Melian 'bird vases' from the Temple Repositories.[1] This unique vessel must also be regarded as having served a ritual purpose.

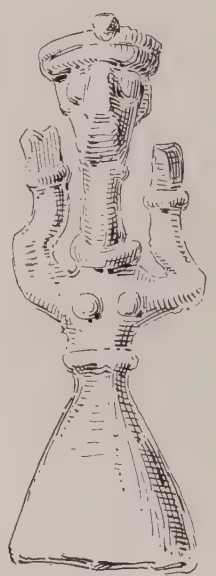
On the adjacent borders of the back yard there was also found the greater part of a painted 'amphora' with conventionalized papyrus decoration in the finest 'Palace Style'.[2] It presents a close parallel on a slightly smaller scale to the noble 'amphoras' with the same style of decoration found along the West borders of the Great Palace, and which seem to have been originally set out in the halls above the Magazines on that side of the Palace.

b

Evidences of Chthonic Cult.

Leaden figurine of Snake Goddess from Pillar Crypt.

The form of worship to which the neighbouring Pillar Crypt was dedicated is sufficiently shown by the double-axe stand and bull's head 'rhytons' with which it was associated. Its specifically chthonic aspect is brought out by a leaden figurine of a rude votive class found above the lower course of the Southern wall of this chamber, and which may perhaps attest the survival of the local cult to the latest Minoan Age, as in the case of the Shrine of the Double Axes described above.[3] The image itself, which is of the 'adorant' type, is a rude degeneration of the 'Snake Goddess' showing a snake with its head above the front of the turban-like head-piece, and with its lower extremity hanging down the back of the neck (Fig. 344).



a

FIG. 344. RUDE LEADEN FIGURINE OF 'SNAKE GODDESS' TYPE FROM PILLAR CRYPT OF 'LITTLE PALACE'.

Was the 'Little Palace' an Expiatory Foundation?

Special significance of succession of Pillar Crypts in relation to earthquakes.

We have here, indeed, a clue to the character of the worship in the group of Pillar Crypts, which together make up almost the whole of the Southern section of the 'Little Palace', occupying about a quarter of its total area. The cumulative evidence points to a cult of the chthonic kind, the special significance of which in this earthquake-stricken district

[1] *P. of M.*, i, p. 557–9 and Fig. 405.

[2] An illustration of this is reserved for the section in vol. iii of this work dealing with the pottery of the concluding Palace Period (L. M. II). The remains of this amphora were, with great liberality, presented to the excavator by the Greek Government and are now placed in the Ashmolean Museum at Oxford.

[3] See p. 332 seqq.

FIG. 345. BACK WALL OF 'LITTLE PALACE' FROM N. END OF PAVED AREA: PART OF GYPSUM SILL OF BROAD WINDOW OPPOSITE.

has already been emphasized.[1] The Minoan Goddess, whose spiritual being could, by means of due ritual, be infused into the pillars of these dark crypts, is here before all things 'the Stablisher'.

The repetition of these 'Pillar Crypts' within the building, coupled with the exceptionally sumptuous aspect of the Lustral Area, where, again, the worshipper descended as it were into the bosom of the Earth, is itself a very suggestive phenomenon. Clearly the 'Little Palace' was, like the greater edifice, at the same time a sanctuary, and its special connexion with the cult of the Goddess of the Underworld may find its true explanation in the tragic circumstances that ushered in the epoch to which it belonged. Built as we see immediately after the great earthquake that overthrew Town and Palace alike towards the close of the Third Middle Minoan Period, may it not have owed its foundation to religious motives of a very particular kind? May we not, in fact, regard its Pillar Crypts as so many 'Expiatory Chapels'? The tripod altars and heads of sacrificed oxen that marked the occasion of the solemn filling in of one of the earthquake-stricken houses show that the need for appeasing the Powers beneath the Earth was very present to the minds of men at that time.

'Little Palace' largely a sanctuary.

Have we here 'Expiatory Chapels'?

Back Yard of 'Little Palace' bordering the Unexplored Mansion.

Owing to the gradual rise of the hill Westwards the greater depth of the soil favoured the preservation of remains on that side of the 'Little Palace', and it was here, as we have seen, that the most important finds occurred. The finest feature, indeed, of the building was the West wall, overlooking a narrow paved yard. This wall was of good limestone masonry, showing in places as many as nine ashlar courses, some of the blocks here, as on the North wall, being finely incised with the 'double axe' and 'branch' signs.

Paved back yard between 'Little Palace' and Unexplored Mansion

At the end of the Northern section of this paved area the building projects Westward, forming an angle enclosing the Magazines described above, and on the Southern face of this projection is visible a broad window opening, looking down the yard and giving light to the small corridor within. This window opening, with part of a long limestone slab forming its sill, is seen in the photographic view (Fig. 345).

Beyond this salient of the building, the continuation of the back yard is cut off, except for a narrow channel, by a projecting bastion of what was clearly another house of exceptional dimensions, immediately West of it. This shallow channel leads to another little paved area which, from a loose

[1] See especially pp. 324, 325, above.

square block within it, grooved above into a shallow basin, was called at the time of the discovery—without sufficient warrant—'the Court of the Olive Press'. Beyond this, again, a narrow paved passage only a little over a metre wide separates the two houses. Drains for surface waters descend to the North and South from the smaller paved area, and a prolongation of the Northern system is seen in a built drain that appears near the North-West angle, and which, in its Easterly course beyond, is joined by a tributary drain proceeding from the 'Lavatory' sink.

Possible bridge between the two buildings.

As already noted, the projecting spur of the 'unexplored Mansion', as it may be provisionally called, approaches so closely to the back wall of the 'Little Palace' near the first landing of the West Stairs as to suggest the possibility that there may have been an actual bridge between the two buildings. Nothing, indeed, could have been more natural than that the great mansion beyond should have been provided with a private access to the practically uninterrupted suite of sanctuary chambers that at this point almost touched its Eastern border.

History of the 'Little Palace' parallel with latest Stage of Greater Palace.

History of 'Little Palace' repeats later course of greater building.

In its history the 'Little Palace' must have reflected the later course of that of the greater building. Its construction, as we have seen, also belongs to the great epoch of general restoration that followed on the destruction of the M. M. III Palace by a great earthquake shock. But, while many other contemporary foundations, such as the South House and the 'House of the Frescoes', for instance, were cut short or suffered a severe set-back at the close of the First Late Minoan phase, whatever interruption may have here taken place at that time was at most transient. As in the case of the Great Palace, and again of the Royal Villa, the history of the building was practically continuous down to the date of the final overthrow, which, however, seems itself to have been only of a partial kind. Here, as there, vessels like the painted 'rhyton' and *alabastra* in the last L. M. II style occurred on the floors. It is also to be observed that remains of inscribed clay tablets came to light in the 'Little Palace' belonging to the Linear Class B.[1]

Partial overthrow at end of L. M. II.

Fragmentary clay tablets of Linear Class B.

As in the case of the greater building, too, the period of palatial

[1] In *Scripta Minoa*, i, I had suggested the possibility of some of these having belonged to the period of Reoccupation. That the use of the Linear Script B survived the overthrow of the Palace is probable, but the squatters who, at a later date, introduced their crude fetish worship into the 'Little Palace' were surely *analfabeti*.

Partial reoccupation of building.

habitation was succeeded by a partial reoccupation of the same kind during the last Late Minoan phase. The Megaron was divided up into small compartments for the use of humbler denizens; and the spaces between the columns of the adjoining balustrade of the old Lustral Area were, as we have seen, filled with a clay blocking for a rude 'fetish' shrine within, bespeaking a religious stage incomparably below that which had produced the beautiful faïence and chryselephantine figures of the great Minoan Age. But one circumstance is specially noteworthy. On this side of the building at least there had been no overwhelming destruction or general conflagration at the end of the palatial period. The wooden door-posts and columns had not been consumed by fire, and were either blocked where convenient, or remained in use. The building in fact was only partially destroyed, and a large part of it had been simply deserted by its original lordly possessors to be tenanted in their place by boorish squatters, after a shorter or longer interval during which it may have remained derelict.

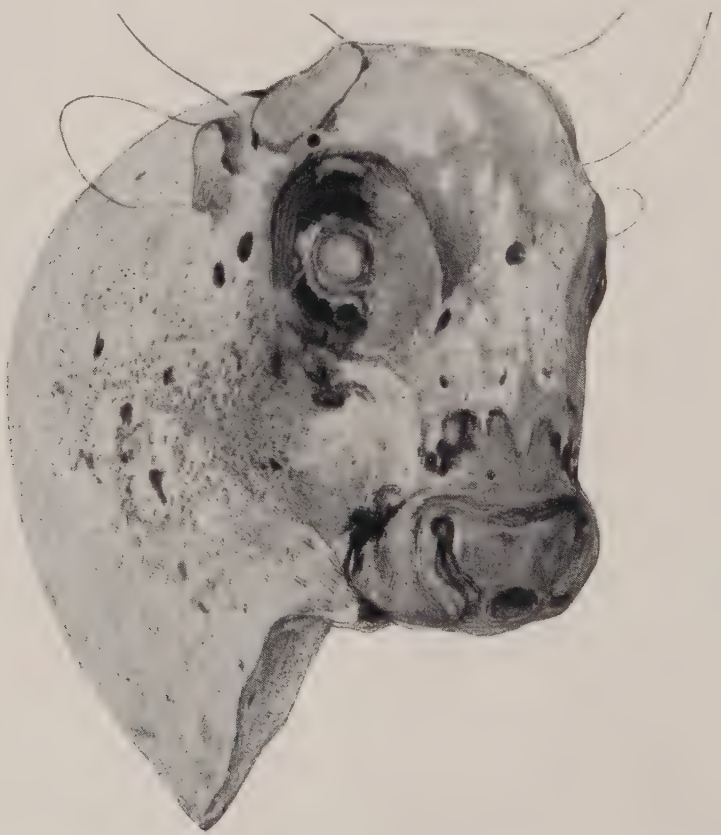


Fig. 346. Bull's Head 'Rhyton' of Painted Clay, L. M. I *a*, Gournià (Boyd-Hawes, Pl. I).

§ 55. Extension of the Town of Knossos: Monumental Remains and Early Cemetery beyond the Kairatos.

'Unexplored Mansion', West of 'Little Palace'; Knossian Quartier St. Germain *on Hellenikà slope—M. M. I* a *Well; Extension of Remains over later (Greco-Roman) Acropolis; Hill of Gypsàdes a Residential Quarter—Houses A and B; Pillar Crypt in House B with Offertory Cups; Houses set closely together; Well below Gypsàdes with M. M. III* a *and L. M. I* a *pottery; Extension, North, of Minoan Town beneath the Greco-Roman; Cemetery of Zafer Papoura, shows no break at end of Palace Period—gradual decadence of L. M. III; Was there a later Palace? Cemetery of Isopata and 'Royal Tomb'—rather connected with Harbour Town; Houses along left river-bank; Roman bridge and probable Minoan route; Slight Minoan traces at Matium, by Karteros mouth; Important Quarter of Knossos on right bank of Kairatos; Terraced roadway; Colossal walls of structure running into steep; Traces of Minoan houses; 'Tomb of the Cow', Middle Minoan chamber tombs along terraces of rocky steep by Mavro Spelio; Earliest Contents M. M. II* b *but continuously used to L. M. III* b*; Stone vessels and M. M. III* b *'rhyton'; L. M. III* b *interments with balance and weights; Figurine of Mother Goddess holding out infant son; Inscribed gold signet-ring; Chamber Tombs prototypes of Mycenaean—derived from Middle Empire Egyptian source.*

The Unexplored Mansion.

The 'Unexplored Mansion' immediately West of the 'Little Palace' runs deep into the hill-side beneath an olive plantation, partly at least on somewhat higher terrace levels. The Eastern façade wall, which is visible for a length of 26 metres, is of magnificent limestone construction with larger blocks[1] than those of the opposite wall of the 'Little Palace'. Like the other, however, it clearly dates from the beginning of the New Era, and the blocks show double-axe signs in the finely engraved style then prevalent. On the terrace level to the North an entrance is visible, and near the other end of the façade is a projection forming part of the presumed bridge, partly cut away by the construction of a Roman well[2] (see Fig. 347). Immediately above this section of the mansion, indeed, about a metre higher

Unexplored mansion.

[1] One block on the South face of the projection measured by me is 2·21 metres long by 1·05 broad and 0·55 m. high.

[2] This is not adequately shown in the plan. The black wall-line should run up to and follow the line of the water channel.

than the Minoan floor-level, are well-preserved remains of a room of a Greco-Roman house with traces of decorative wall-paintings showing upright marbled bands of green and red.

Western Extension of Town: 'Hellenikà' and later Acropolis Height.

Knossian 'Quartier St. Germain' on Hellenikà slope and terrace level.

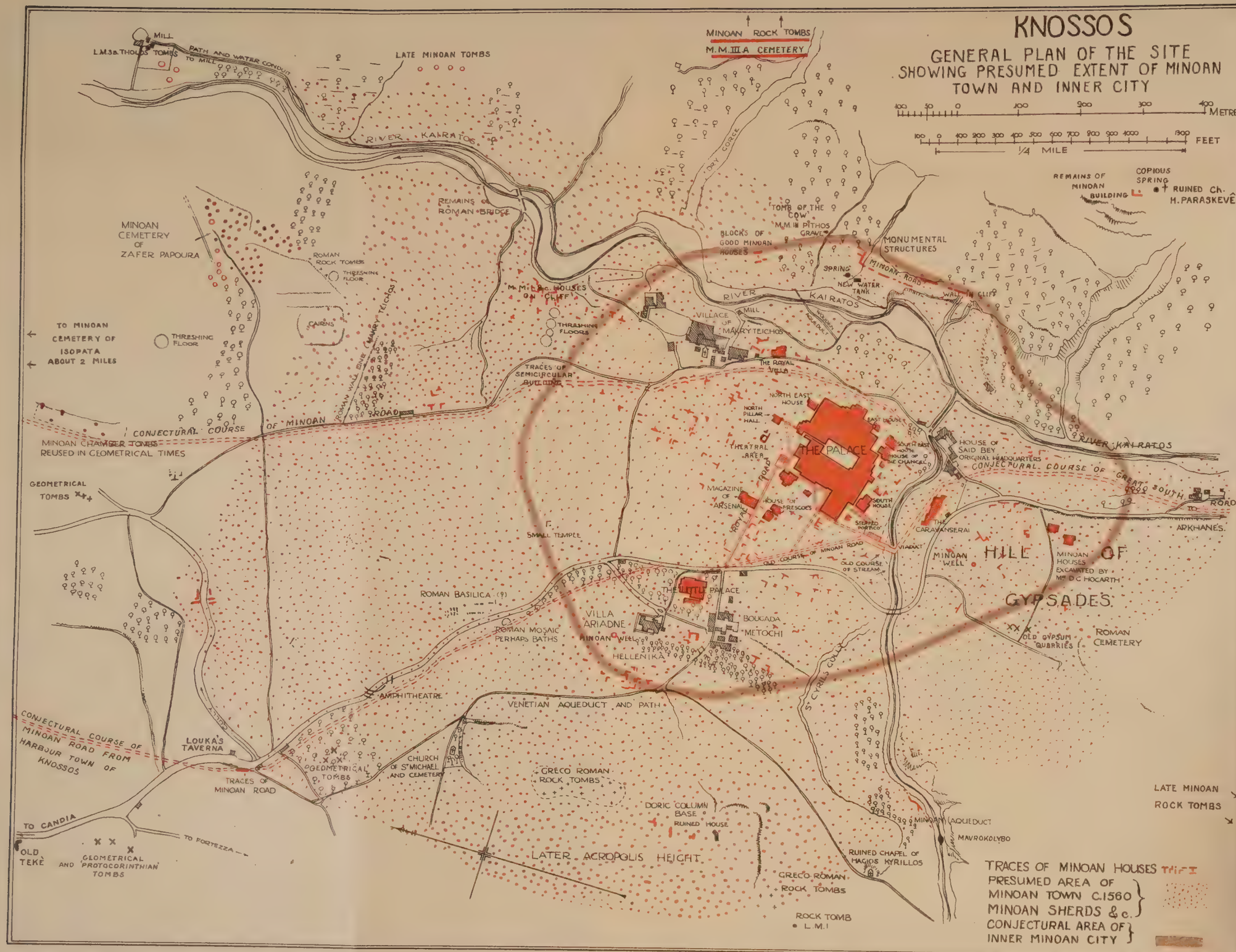
Still farther, on the hill-side, about 35 metres South-West of the Southern end of this fine façade, a deep trial pit revealed an angle of another substantial house. It looks, indeed, as if this area of the Western slope, with its terrace level above, had been a kind of 'Quartier St. Germain' of the Minoan Knossos. The name 'Hellenikà'—the 'Heathen' ruins—which attaches to this and extends to the site of the neighbouring Villa Ariadne, may be rather connected with the more superficial remains that here exist, belonging to the Classical period, and among which a fine fifth-century relief of Heraklês and Eurystheus claims a first place.[1]

Fig. 347. Section of E. Wall of Unexplored Mansion, showing Projection towards an Angle of Little Palace possibly bridged over. To Left above, Remains of Roman House.

M. M. I *a* well.

The terrace level here, just East of the course of the Venetian Aqueduct, is deeply underlaid with Minoan remains, going back to M. M. I *a*. A well was discovered, indeed, in a dramatic way, which at the same time illustrated the ubiquity of the evidences of Minoan enterprise on that side. Seeking for a fresh water-supply for the garden, the vineyard a little North-West of the Villa suggested itself to me as a likely location. The workmen

[1] This seems to have belonged to the frieze of a Doric temple, though its final destination had been to serve in a much damaged state as a roof slab of a Roman *cloaca*.


KNOSSOS
GENERAL PLAN OF THE SITE
SHOWING PRESUMED EXTENT OF MINOAN
TOWN AND INNER CITY
METRES
FEET
¼ MILE
MILL
L.M.3b THOLOS TOMBS
PATH AND WATER CONDUIT TO MILL
LATE MINOAN TOMBS
MINOAN ROCK TOMBS
M.M.III.A CEMETERY
RIVER KAIRATOS
DRY CORCE
REMAINS OF ROMAN BRIDGE
MINOAN CEMETERY OF ZAFER PAPOURA
ROMAN ROCK TOMBS
THRESHING FLOOR
M.M.III.c HOUSES ON CLIFF
CAIRNS
TO MINOAN CEMETERY OF ISOPATA ABOUT 2 MILES
THRESHING FLOOR
ROMAN WALL LINE
MAKRYTEICHOS
TRACES OF SEMICIRCULAR BUILDING
CONJECTURAL COURSE OF MINOAN ROAD
MINOAN CHAMBER TOMBS REUSED IN GEOMETRICAL TIMES
GEOMETRICAL TOMBS
SMALL TEMPLE
ROMAN BASILICA (?)
ROMAN MOSAIC PERHAPS BATHS
VILLA ARIADNE
MINOAN WELL
HELLENIKA
THE LITTLE PALACE
BOUCADA
METOCHI
AMPHITHEATRE
VENETIAN AQUEDUCT AND PATH
CONJECTURAL COURSE OF MINOAN ROAD FROM HARBOUR TOWN OF KNOSSOS
LOUKA'S TAVERNA
GEOMETRICAL TOMBS
CHURCH OF ST MICHAEL AND CEMETERY
TRACES OF MINOAN ROAD
GRECO ROMAN ROCK TOMBS
DORIC COLUMN BASE
RUINED HOUSE
TO CANDIA
TO FORTEZZA
OLD TEKÈ
GEOMETRICAL AND PROTOCORINTHIAN TOMBS
LATER ACROPOLIS HEIGHT
ROCK TOMB L.M.I
GRECO ROMAN ROCK TOMBS
RUINED CHAPEL OF HAGIOS KYRILLOS
MINOAN AQUEDUCT
MAVROKOLYBO
LATE MINOAN ROCK TOMBS
TOMB OF THE COW M.M.III PITHOS GRAVE
BLOCKS OF GOOD MINOAN HOUSES
MONUMENTAL STRUCTURES
MINOAN ROAD
SPRING
NEW WATER TANK
RETAINING WALL IN CLIFF
VILLAGE OF MAKRYTEICHOS
MILL
THE ROYAL VILLA
NORTH EAST HOUSE
NORTH PILLAR HALL
CENTRAL AREA
THE PALACE
EAST HOUSE
SOUTH EAST HOUSE OF THE CHANCEL
SOUTH HOUSE
STEPPED PORTICO
MAGAZINE OF ARSENAL
HOUSE OF FRESCOES
ROYAL ROAD
THE CARAVANSERAI
VIADUCT
OLD COURSE OF MINOAN ROAD
OLD COURSE OF STREAM
MINOAN WELL
HILL OF GYPSADES
MINOAN HOUSES EXCAVATED BY Mr D.G. HOGARTH
OLD GYPSUM QUARRIES
ROMAN CEMETERY
ST CYRILLS COLLEGE
REMAINS OF MINOAN BUILDING
COPIOUS SPRING
RUINED CH. H. PARASKEVÊ
HOUSE OF SAID BEY ORIGINAL HEADQUARTERS
CONJECTURAL COURSE OF GREAT SOUTH ROAD
TO ARKHANES
RIVER KAIRATOS
TRACES OF MINOAN HOUSES THIS I
PRESUMED AREA OF MINOAN TOWN C.1560
MINOAN SHERDS &c.
CONJECTURAL AREA OF INNER MINOAN CITY

wished to sink a shaft farther afield, but the general lie of the hill-side above led me to single out a large block amid the neighbouring vines and to bid the men to dig where I had made a cross in the earth beside it with my stick. To the awed astonishment of all, they had hardly uncovered a foot of soil when they found themselves opening up an ancient well surrounded with rubble masonry, which, however, had to be removed for enlargement. After clearing this for about 35 ft., a copious spring of water was struck together with two intact pitchers of the earliest Middle Minoan fabric (M. M. I *a*). The well now supplies the Villa Ariadne with exceptionally pure water.

Extension of remains over later Greco-Roman Acropolis.

On the level hill-top to the West, the Acropolis of the Greco-Roman town, Minoan remains are again abundant, and sherds are also plentiful on its farther slope, especially at a point to the North-West. On the shoulder of the hill South of the hill-top the lower part of a rock-hewn chamber tomb came to light with L. M. I *a* relics—a record of a cemetery on this side.

Southern Extension of Town: Hill of Gypsàdes.

Hill of Gypsàdes—a residential quarter.

Lower down to the South-West is the spring of Mavrokolybo, already mentioned, with a section of a Minoan conduit heading towards the Palace, while, beyond the torrent, a large part of the slope of the hill of Gypsàdes that rises above it was evidently occupied by a populous quarter. South of the 'Caravanserai' the construction of a new section of the modern road from Candia, leading to Arkhanes and Pedeada, brought out for over a hundred metres an almost continuous line of Minoan house walls. Beyond this, at a slightly higher level on the hill-side, lie the two Minoan houses explored by Dr. D. G. Hogarth in 1900.[1]

Houses A and B.

These houses derive a special interest from the fact that their discovery first revealed the existence of a Minoan town at Knossos. House A was a fair-sized building with a mean width of about 15 metres from North to South, and 14 from East to West. Its surrounding walls along much of their extent showed two courses of gypsum blocks above the foundations, and in part of the West wall are three courses of good limestone masonry with large blocks. Somewhat lower down the slope is another commodious house, B, the Eastern half of which, however, has been denuded away, while between the two were traces of a third house. At the South-West angle of House A is an entrance, with adjoining lobby lined with gypsum slabs, and a broad inner threshold leading to it, but in neither

[1] See D. G. Hogarth, *Knossos: Early Town*, *B.S.A.*, vii (1900–1), p. 70 seqq. (with architectural notes by Mr. Theodore Fyfe).

house was it possible to make out any intelligible scheme in the interior arrangement. This was largely owing to the entire absence at that time of any comparative materials that could serve as a clue to certain phenomena of the excavation. On the other hand, supplementary researches have been largely rendered abortive by native marauders who have carried off most of the gypsum remains within the buildings, to be used in pursuance of their barbarous methods of preserving wine. The process of destruction was as complete as its purpose was unheard of. Door-jambs, paving slabs, the broken up fragments of sacred pillars, were dissolved, to be eventually drunk up.

Fig 348. Pillar Crypt in House B at Gypsàdes showing Offertory Cups ranged in Rows inside Pillar.

Pillar Crypt in House B with offertory cups.

In House B were two typical pillar crypts, one of which, already referred to, was of special interest from the fact that the pillar, built up of alternate 'header and stretcher' courses of limestone, was flanked by a group of nearly two hundred of the usual clay cups—such as were found piled, for instance, in the votive stratum of the Dictaean Cave, set, bottom upwards in regular rows, and covering in each case a small heap of carbonized vegetable matter.[1] These are shown in Fig. 348, from a photograph kindly supplied to me by Dr. Hogarth.

Houses set closely together.

There can be little doubt that both these houses in their present form were works of the same epoch of restoration that followed the catastrophe towards the end of M. M. III, as most of the other excavated town-houses at Knossos. Middle Minoan pottery—at that time vaguely described as 'Kamares' ware,—was found immediately below the floors. It looks, moreover, as if, as in other parts of the Town area, the houses had been set closely together.[2] House A, in fact, was only separated from another

[1] Hogarth, *loc. cit.*, p. 76 and cf. A. E., (1901), p. 111. *Mycenaean Tree and Pillar Cult*, *J. H. S.*, xxi

[2] See the General Plan, *B. S. A.*, vi, Pl. VII.

building to the South of it by a passage-way little more than a metre broad. Another house must have approached almost or quite as close to its North-West corner. Intermediate between this and House B, the walled space originally marked 'Cistern' seems to have been part of another dwelling.

FIG. 349. POTTERY FROM WELL ON NORTHERN SLOPE OF GYPSÀDES. L. M. I *a*.

Well with M. M. III *a* and L. M. I *a* pottery.

Higher on the slope of Gypsàdes, East of the site above described, building operations have revealed the traces of further Minoan houses, while, beyond, are Late Minoan rock tombs with *larnax* burials. Lower down, trial pits sunk during the first excavations revealed a further series of house remains between A and B and the older and later roads to the South (see Plan, facing p. 547). In this area a Minoan well was excavated in 1913, which contained in its lower deposit remains of some interesting cups and bowls, to which attention has been already drawn[1] as affording a good illustration of an early stage of M. M. III, when a somewhat finicking form of polychromy still survived. Above these, clearly separated by a considerable interval of time, was another larger deposit of

[1] *P. of M.*, i, pp. 595, 596 and Fig. 437. The polychrome vases must be ascribed to M. M. III *a*.

vessels representing the mature early stage, *a*, of the First Late Minoan Period. Some samples of these are shown in Fig. 349, from which it will be seen how popular here the reed ornament was at this epoch. A break in continuity at the close of L. M. I *a* is, as has been already shown, very frequent in the town-houses of Knossos and points to some catastrophe at that date.

Extension of Town Northwards: Zafer Papoura Cemetery.

Extension North of Minoan town under Greco-Roman.

Remains of Minoan houses, forming an extension of those nearer the Palace borders, are traceable on both sides of the road, North of the new bridge, though in this area they had been a good deal interfered with by Greco-Roman constructions. Parts of house fronts have been brought to light on each side of the Minoan paved way or 'Royal Road' described below.[1]

North, again, of this line and of the outlying buildings on that side of the Palace, where lay the centre of Greco-Roman Knossos, its building activity has much obscured the earlier evidence. Many Minoan relics occur, however, which have been worked up into the rubble-strewn surface earth, and in places deep trial pits have also struck a Minoan stratum. Considerably North of this, indeed, where the gully of a small stream crosses the site, good Minoan walling is visible in the steep banks. Other remains occur below the path leading from the village of Makryteichos to the long Roman wall-line that gave it its name, distant some 400 metres from the Palace.

Cemetery of Zafer Papoura.

About 200 metres, again, beyond the wall lies the extensive Minoan Cemetery of Zafer Papoura[2] (see Plan, opp. p. 547), the position of which may be fairly taken to point to an urban extension in that direction.

An interesting feature of this Cemetery is that, while it undoubtedly overlaps the brilliant Period—L. M. II—which marks the latest stage of the Palace as a Palace, a large number of graves that belong to the immediately succeeding cultural phase, L. M. III *a*, contain relics of but little inferior workmanship. The three sepulchral types of the earlier group—the shaft graves, chamber tombs, and 'pit caves'—continue to be found, showing an unbroken survival of family tradition. To whatever causes was due the great overthrow of the later Palace they did not bring

No visible break at end of Palace Period.

[1] See p. 572 seqq.

[2] See A. E., *The Prehistoric Tombs of Knossos* (*Archaeologia*, lix and Quaritch (1906)). Among tombs containing particularly fine objects of L. M. II style may be mentioned the Tomb of the Tripod Hearth, no. 14 (p. 34 seqq.), with its splendid bronze group, the Chieftain's Grave, no. 36 (p. 51), with its 'horned' sword and gold-plated cruciform sword with engraved designs, and the Shaft Grave, no. 68 (p. 74), with the painted stirrup-cup showing fine 'metallic' foliations.

with it any real break in the course of Late Minoan culture. The models supplied by the great Palace style of wall- and vase-painting, of metal-work and gem engraving continued to be followed.

Gradual decadence in L. M. III.

A period of immobility in Art is succeeded by one of gradual decadence, but the course of Minoan civilization, whether still along the level or on the slight downward incline, in the main suffered no interruption.[1] Even the alien elements that make themselves perceptible in L. M. III *b* seem to have been of very gradual intrusion.

It is obvious that what is true of the tombs is also true of the adjacent Town. Houses, of which the construction is entirely due to this later period are, indeed, still to seek, though we find some record of the L. M. III *a* stage in certain deposits in reoccupied chambers of partially ruined buildings, as, for instance, in the Royal Villa. Relics of the later 'reoccupation' stage marked by the contents of the 'Shrine of the Double Axes' and by those of the 'Fetish Shrine' of the 'Little Palace' are more widely diffused and are particularly common in the Domestic Quarter.

Was there a later Palace?

The comparatively unchanged character of life at Knossos in the period that succeeded the final catastrophe of the Palace leads to the conclusion that some smaller, equivalent building must have taken its place. It would be natural, indeed, to suppose that some place was found for a continuance of the administrative functions of the Priest-Kings within the area of the old Palace itself, but no sufficient evidence of this has been preserved.

Cemetery of Isopata and Royal Tomb.

Rather connected with Harbour Town.

About two miles farther along the range of hills on the Southern slope of which the Zafer Papoura cemetery lies, its table-headed Northern bluff, which overlooked the Harbour Town, supplies the site of another Minoan cemetery known as Isopata. This conspicuous burial-place, to which the Royal Tomb[2] belongs, may be taken to stand in connexion rather with the Harbour Town than with Knossos itself, though it seems probable that an ancient route ran from the neighbourhood of the Palace along the West flank of the Isopata range, on its way to the Port.

Extension of Town along banks of Kairatos.

This route in its earlier course must have roughly corresponded with the mule path that leads Candia-wards from the Makryteichos village. From there in the other direction it passed beneath the old Palace site and, crossing the Vlychià torrent, would have reached a point of junction with the 'Great South Road' (see Plan, opp. p. 547). Along this section the Minoan

[1] *Op. cit.*, p. 133.

[2] See Vol. iii.

Houses along left river-bank.

predecessor of the present track must have served a succession of houses, of which there are traces both North and South of the 'Royal Villa'.

Some of these houses descended to the banks of the Kairatos river, and, a little South of the point where it is joined by the Vlychià brook, considerable remains of the walls of one of these is visible in its declivitous right bank. North, again, of the village of Makryteichos, where a high bluff stretches along the margin of the broad river-bed, its precipitous edge, continually denuded by the action of water, shows plentiful remains of small houses, containing sherds that go back to the beginning of the Middle Minoan Age.

Minoan Remains East of Kairatos Stream.

Roman bridge and possible Minoan route.

North of this bluff, where a small intermittent watercourse runs down towards the Kairatos, would have opened the most natural line of approach to the stream from the centre of the Greco-Roman town. Here, in fact, on either side of it, the piers and, on the West side, the approaching causeway of a Roman bridge, are still preserved, mainly constructed of concrete. From this point a Roman road—first following the right bank of the river and then crossing a high rock-strewn plateau—may have brought Roman Knossos into connexion with its second maritime outlet of Matium at the mouth of the Karteros river, where, indeed, the rocky headlands on either side are honeycombed with Greco-Roman chamber tombs. Near the sea Dr. Hatzidakis found some remains of house-walls associated with Minoan pottery and other sherds above the 'Cave of Eileithyia' a little inland of this,[1] but repeated search on my own part on the neighbouring steeps has failed to add to this evidence. It seems preferable to believe that the main Minoan line of communication to the North-East, with which some superficial traces in the pass above the village of St. Elias may be brought into connexion, rather headed directly across the rocky mass of the Kakon Oros to the port of Niru Khani, which, as we have seen, was a much more important Minoan haven.[2]

Slight Minoan traces at Matium by Karteros mouth.

Important quarter of Knossos on right bank of Kairatos.

Of the Minoan bridge or bridges across the Kairatos no traces now exist, but the researches carried out in 1926 indicate that on the farther side of the stream a narrow but important quarter of the Minoan city stretched along the slope opposite the Palace and its dependencies. Terrace walling of good construction had long been noted on the upper edge of the steep about 200 feet above the stream, facing the South-East angle of the Palace, though excavation had failed to throw any further light on it.

[1] See below, p. 839.

[2] See above, p. 280 seqq.

From this point, however, an upper and lower line of a similar construction, running along natural terrace edges, was traced at intervals as far as the opening of a gully, about 225 metres to the North. The lower line of walling

Terraced roadway.

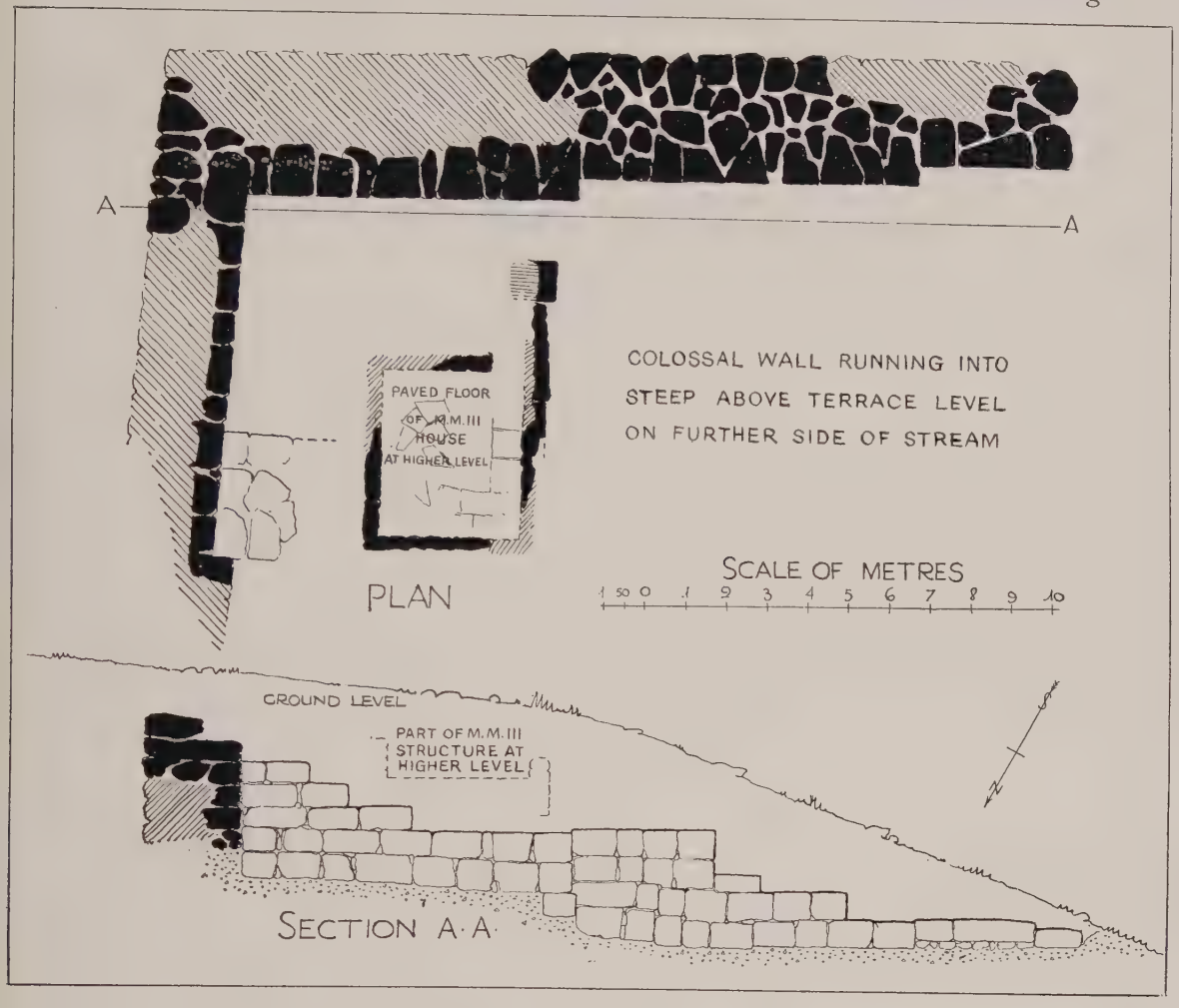

A
A
PAVED FLOOR OF M.M.III HOUSE AT HIGHER LEVEL
COLOSSAL WALL RUNNING INTO STEEP ABOVE TERRACE LEVEL ON FURTHER SIDE OF STREAM
PLAN
SCALE OF METRES
1 50 0 1 2 3 4 5 6 7 8 9 10
GROUND LEVEL
PART OF M.M.III STRUCTURE AT HIGHER LEVEL
SECTION A·A

FIG. 350. MASSIVE WALL RUNNING INTO STEEP ABOVE RIGHT BANK OF KAIRATOS.

seems to have supported the course of a Minoan roadway leading to this point, where remains of a far more imposing character were brought to light by exploratory excavations undertaken here towards the close of the season of 1926.

Monumental Structure on Right Bank.

A wall of massive blocks made its appearance, increasing in width by small projections from 2·60 to 3·50 metres (about 11 ft. 4 in.) and running

Colossal walls of structure running into steep.

due East into the hill-side for a distance of somewhat over 22 metres. At this point it turned North at a slightly oblique angle, about 11 metres of this section, being partly brought out before the work had to be closed down. The wall here was 2·50 metres, increasing to 3 metres thick. At a lower level, again, were remains of another wall-line leading up to it and parallel with the first wall, from which it was separated by an interval of four and a half metres (see the Plan and Section by Mr. Piet de Jong, Fig. 350).

The general character and facing of the masonry of these colossal structures resembled that of the earliest Palace, and their relatively early date was further brought out by the discovery, at a level about 3·75 metres higher than the base of the neighbouring wall section, of the paved floor of a chamber on which rested the remains of M. M. III *a* pots.

In massiveness of construction there is nothing in the Palace itself comparable to this work. The supporting walls on the East and South sides of the Stepped Portico are themselves only about 2 metres broad, and it is only the piers of the Minoan Viaduct which afford an adequate parallel in their dimensions, though these are apparently of later construction.

It is impossible, with the evidence before us, to ascertain the functions of this mighty work, but the most probable explanation is that it served as the support of constructions on a terrace level above. From its position, on the flank of a watercourse and above a spring on a lower terrace, it seems possible that it may have been connected with some Minoan reservoir.

Early Chamber Tombs in Rock Terraces of Height to the East.

Traces of Minoan houses.

North of this point, at a somewhat lower level, limestone blocks, one at least with an early incised sign, point to the existence of well-built Minoan houses. A little above the area in which these blocks lie, the first discovery

'Tomb of the Cow' M. M. III.

was made of an interment of the Middle Palace Period. The methodical search for tombs in the early years of the excavation had led to no results till at this spot a cow put her foot through the bottom of a jar, placed in a reverse position in a small pit over the contracted skeleton of a small child, accompanied by some poor clay vessels.[1] The jar was of an interesting, false-mouthed kind, paralleled by an example from a M. M. III *b* Magazine of the South-East Palace region.[2]

Continued researches, however, failed to bring to light any further

[1] See A. E., *Knossos, Report*, 1902 (*B. S. A.*, viii), pp. 88, 89 and Fig. 49.

[2] Compare *P. of M.*, i, p. 582, Fig. 426.

interments on that side till, in 1926, traces of rock tombs were observed at a much higher level.

Spring Chamber of Mavro Spelio.

About 200 metres North of the 'Cow's Tomb', immediately above the river-bank, is the opening of a dry gully which, as it ascends the steep, becomes a regular cleft in the rocky hill-side. The whole had clearly owed its origin to an ancient spring that had issued from the face of the limestone escarpment above. Here opens Mavro Spelio or the 'Black Cave', which seems to represent the chamber of a sacred spring, with an inner reservoir and a shallow basin cut out in its outer vault. From the North flank of the escarpment, where the Black Cave opens, the mountain side recedes in a semicircular bay, broken into a succession of curving terraces, and suggesting, when seen from the opposite side of the valley, the *cavea* of a colossal theatre. It was on some of these terraces, partly improved by the hand of man, that badger holes gave the first clue to the existence of a series of rock tombs. They were excavated on the steep, at a height of from four to five hundred feet above the level of the stream, and had been made accessible by a zigzagging Minoan path that wound up from terrace to terrace.

Early Chamber Tombs near.

Prototypes of later chamber tombs.

At the close of my long campaign of 1926, six of these were excavated.[1] With individual variations they proved in all cases to be chamber tombs with a blocking of dry masonry at the entrance, and though approached by a short *dromos*, were of essentially the same type as the Late Minoan examples seen in the cemeteries of Zafer Papoura and Isopata. The ground-plan of the chamber, was, however, as a rule less regularly formed, and in several cases the entrance led to more than one chamber.

Two of the simpler forms are shown in Fig. 351, A, B. (A) Tomb 1 seems to have been planned as a fairly square chamber, the North angle of this having been cut off owing to some defect in the rock. (B) Tomb 3 is square-cut in its anterior angles, and semicircular behind, while in the middle of it is a small cavity such as is often seen in later chamber tombs. The tombs had been in continuous use down to L. M. III *b*, but in all cases some relics came to light of a fabric at least as early as M. M. III and, in some, of M. M. II *b*. In Tomb 6, within its Southern side chamber, a group of pots belonging to the early phase, *a*, of M. M. III, were found intact, including a high-beaked ewer of a pale clay with reddish bands, and a characteristic polychrome jug with a prominent collar. In Tomb 3, which contained well

Earliest contents M. M. II *b* and III *a*: but re-used in L. M. III.

[1] I received valuable assistance in the investigation of these from Mr. E. J. Forsdyke of the British Museum, who continued the exploration of this early cemetery during the present season (1927). A full publication will be given by him in *B. S. A.*, xxviii. A summary account was given by him to the Society of Antiquaries, Oct 20, 1927.

Stone vases: M. M. III *b* 'rhyton'.

preserved relics of L. M. III date, were several stone vases, apparently taken over from the earlier interments, and among them a very beautiful 'rhyton' (Suppl. Pl. XXI, *a*) in the secondary stage of development from the ostrich-egg type,[1] belonging to the close of M. M. III *b* or beginning of L. M. I *a*.

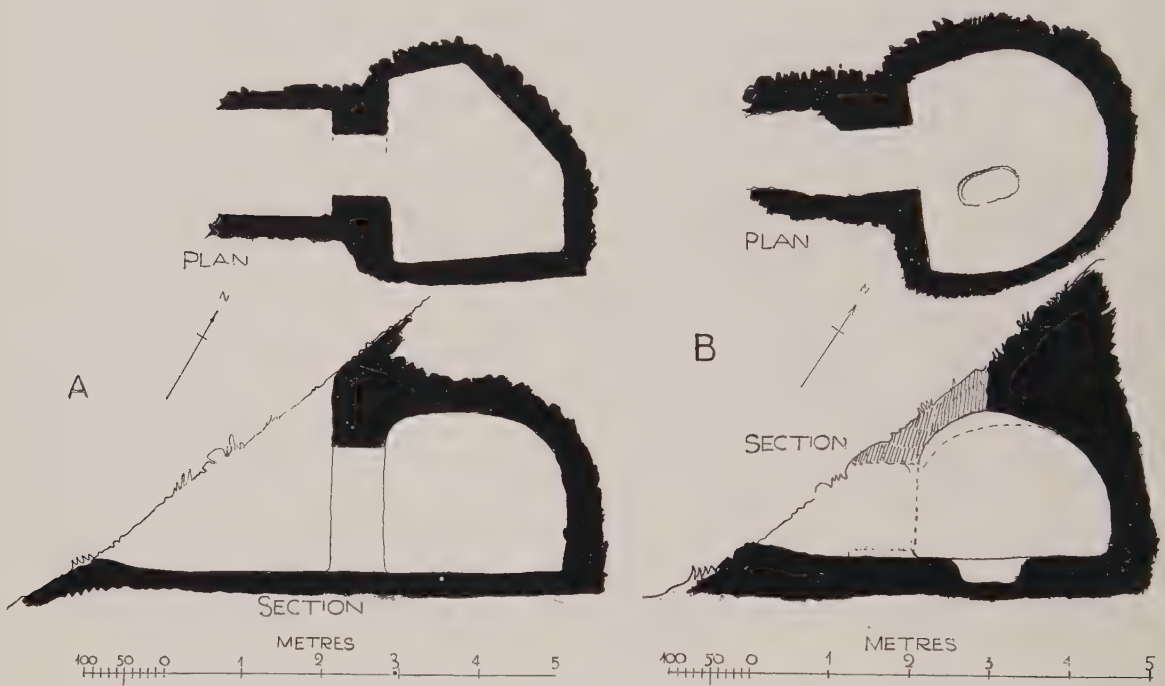


FIG. 351. PLAN AND SECTION OF CHAMBER TOMBS 1 (A) AND 3 (B); M. M. III *a*. MAVRO SPELIO, KNOSSOS.

L. M. III *b* interment with balance and weights.

Among the later relics from this tomb were remains of bronze scales, not of the sepulchral class illustrated by the specimen made of thin gold plate from the Third Shaft Grave at Mycenae, but for ordinary use, and accompanied by leaden weights. The departed citizens of the later Knossos thus prolonged their business activities in what seems to have been a 'New Jerusalem' of a very material kind.

In the same deposit was also found a female idol on a cylindrical base of the class represented in the 'Shrine of the Double Axes'. Of still greater interest was a figure of the same kind found by Mr. E. J. Forsdyke of the British Museum, who continued the Excavation in 1927, holding out an infant in an upright position such as is seen in ikons of the Byzantine

[1] See Table, p. 225, Fig. 129, above.

Theotokos and their Western equivalents (see Suppl. Pl. XXI, B). This is an unique version of the Minoan Mother Goddess.[1]

In another of the more recently explored tombs Mr. Forsdyke found a remarkable gold signet-ring, with a round besil on which was an incised inscription of the Linear Class A (Fig. 352). This was spirally arranged, winding inwards like that on the Phaestos disk.[2] It certainly is of M. M. III date.

Inscribed gold signet.

FIG. 352. BESIL OF GOLD SIGNET RING WITH INCISED INSCRIPTION OF LINEAR CLASS A, CHAMBER TOMB, MAVRO SPELIO, MUCH ENLARGED. $(\frac{8}{1})$

Specially important from the chronological point of view, however, was his discovery of a pit in Tomb XVII, the contents of which belonged exclusively to the maturer phase (*b*) of M. M. II. Characteristic specimens of some of the vessels found are given in Fig. 353.[3] With them was a cube of iron.

M. M. II *b* vases.

The importance of this result lies in the fact that the typical class of rock-cut chamber tombs that were of such wholesale construction at Mycenae and elsewhere in Mainland Greece from the beginning of the Late Minoan Age onwards is thus shown to go back in Crete at least to the eighteenth century before our era. The ideal form was clearly a square chamber with a short approach and narrower entrance, and its real prototypes are to be sought, in a more elaborate form, in Beni Hasan and other Middle Empire Egyptian Cemeteries.[4] It was not for nothing that in the early deposits of Tomb XVII there occurred seal-stones presenting types copied from Twelfth Dynasty scarabs.[5]

Prototypes of Mycenaean chamber tombs.

Type derived from Middle Empire Egypt.

It will be seen that there is convincing evidence of the existence of

[1] The Goddess is more usually associated with a youth, often armed. But a younger boy-God also occurs.

[2] The inscription is possibly talismanic; the sign 𐄷 which begins the first and last sign-group is a derivative of the Double Axe sign.

[3] From a photograph kindly supplied to me by Mr. Forsdyke.

[4] E. g. P. E. Newberry, *Beni Hasan*, i, Pl. II, Tombs 6 and 26. The sepulchral pits supply a further parallel. As often at Beni Hasan, some of the early tombs of Mavro Spelio are approached by a mere landing.

[5] Cf. above, p. 200, Fig. 110 A, *a*, *g*.

a suburban extension of the Minoan town of Knossos beyond the Kairatos. Here were house remains, terrace walls and traces of a roadway, a monumental structure, a spring sanctuary, and a cemetery used early and late.

FIG. 353. M. M. II *b* VASES AND LUMP OF IRON FROM PIT IN CHAMBER TOMB NO. XVII, MAVRO SPELIO.[1]

[1] The following indications are taken from notes kindly supplied to me by Mr. Forsdyke: (*a*) Upper part of bridged-spout ('hole-mouth') jar, very fine fabric with sharp bevelled lip; (*b*) small round-mouthed jug with decoration of thin white stripes on black ground (resembles specimen from Loom-Weight Deposit); (*c*) similar jug with white splash decoration on black; (*d*) squat trough-spouted jug with black wash on body only; rough fabric; (*e*) dish half blacked inside and out; (*f*) conical cup, thin, rough fabric, with strongly wheel-marked walls and string-marked base: the upper part dipped in black wash.

§ 56. The 'Broad Knossos' of Homeric Tradition: Golden Age of Minoan Crete.

Great extension of Minoan Town of Knossos; Inner 'Residential' area; Poorer outer zone; Threefold composition of Knossos; Houses of 'Residential' Quarter, free-standing; Block system of Provincial Towns; Estimates of house dimensions—Were they legally graded? Estimate of number of 'residential houses' and of burgher population; Poorer Quarters compared with Provincial agglomerations in blocks; Great preponderance of poor interments in Zafer Papoura Cemetery; Estimated population of Minoan Knossos—Unique centre of human habitation; Primitive Mainland centres, like Dimini, compared; Variety and originality of Knossian houses—cultured taste of occupants; Diminished use of timber construction—symptom of deforestation; Epic tradition of 'broad Knossos' verified; Great crowds on grand stands of frescoes; Already populous site in remote Neolithic times; General contemporary outburst of building activity at beginning of New Era—Mansions of Tylissos and Niru Khani—similar phenomena at Zakro and Palaikastro; Mycenaean 'megaron' plan of four columns round central square; Great diffusion of wealth—Bronze hoards of H. Triada, Tylissos, Pseira, and Knossos; Uniformity of architectural and cultural types; Indications of Central Control; The Golden Age of Minoan Crete—Compared with Pax Romana.

Estimated Town Area of Minoan Knossos.

Great extension of Minoan town of Knossos.

From what has been said in the preceding Section it will be seen that the town of Knossos must have covered a very considerable area. The traces may be said to extend over a length of about a kilometre and a half from North to South, and, at its widest, including a strip beyond the stream, about the same distance from the Eastern borders to the farther slope of the later Acropolis on the West, where Minoan relics continue to abound (see Plan, facing p. 547).

Assuming some such extension of the remains as that indicated in the Plan referred to, we may perhaps estimate for the urban settlement a mean breadth of some 750 metres, which, taking the length from North to South as about 1,500 metres, would give a total superficies of 1,125,000 square metres.

In considering the bearings of this result on the question of the ancient population we must at the outset allow for different regional conditions within the town area.

South and West of the Palace, within a radius of about 400 metres

Inner 'residential' area.

wherever excavation has been carried out or deep soundings taken, well-built and free-standing houses have been struck, closely set beside each other, that had evidently belonged to a prosperous burgher class. On the North side of the Palace and the 'Royal Road' to be described below, beyond a succession of nearer buildings, there are indications of similar conditions, though here the evidence has been obscured by the structures of the Greco Roman town. The village of Makryteichos has also interfered with exploration, but good house remains, including traces of houses North of the 'Royal Villa', extend along the valley to a point South-East of Houses A and B. We have seen that on the opposite terraces beyond the stream we have evidence of similar architectural activity.

Poorer outer zone.

Beyond the zone thus approximately indicated, however, and tentatively marked by a lilac band in the Plan, though Minoan traces still extend in every direction, the evidence points more to humbler dwellings of rubble construction, good ashlar blocks being of rare occurrence. We are thus led to the conclusion that there existed around the Palace two distinct zones of habitation. The inner of these was the true Minoan 'City'. The outer was of a more suburban nature, and inhabited by a poorer class, such as we find represented in a series of the Zafer Papoura tombs.

Threefold composition of Knossos.

Knossos would then have been of threefold composition, the Palace, the City proper—the Greek *ἄστυ*—and the suburbs or *προάστειον*. The best comparisons for the latter should unquestionably be sought in the plans of country towns that have been recovered by the excavations of Gournià and Palaikastro, where the block system was everywhere prevalent. But the central civic area of Knossos was constructed on different principles.

Inner Residential Quarter: the City.

Houses of residential quarter free-standing.

Except in the Later Neolithic building in the Central Court, where we find an agglomeration of more than one house, it is clear that at Knossos the rule in the 'residential' quarter was to have interspaces between the individual buildings. Even in the case of the small Middle Minoan houses by the South-East Palace Angle, and again those in the area North-West of the 'House of the Frescoes', the outer walls were separated from their neighbour's dwellings. All the evidence regarding the houses built at the beginning of the New Era is consistent as to this point. In the whole series of excavated examples, we see that in every instance the house was isolated by at least a small intervening space from those around it.

This practice contrasts with that of the small provincial towns that have

been explored at Gournià and Palaikastro, where the block system prevails, groups of houses, only, being isolated from similar groups. We may well believe that at the principal seat of the Priest-Kings the free-standing arrangement of each individual house—such as we see in our Garden Cities—had been enforced by severe legislation from a very early period. It would not be surprising, indeed, if there had also been provisions regarding 'ancient lights'.

Block system of provincial towns.

Better houses at Knossos, still closely set.

It may be said that in every case where there has been occasion to explore beyond the boundaries of an excavated house, another house-wall has been struck in close proximity to it. In places, as in the case of the 'House of the Frescoes' and of the back wall of the 'Little Palace', only the width of the drain or water-channel separates one building from another. Like the Middle Minoan houses that had preceded them, those of the New Era, though somewhat larger in dimensions, seem to have been as closely packed together, bordered by narrow lanes, and sometimes by spaces through which a human being could hardly squeeze.

Three of the typical Knossian private houses, the 'South House', the 'Royal Villa', and the 'House of the Chancel Screen', the plans of which have been recovered practically in their entirety,—and to these may be added the 'House A',—cover an almost identical area of about 220 square metres. The 'House of the Frescoes', on the other hand, works out at only 130, and the houses that surround it seem to belong to the same scale. For the ordinary town-houses of well-to-do citizens we may take perhaps a mean of 200 square metres, and add another 50 for the share of the individual building in the rather narrow surrounding space. The greater dimensions of the North-East House, which seems to have been largely a store-house, and of the 'Little Palace',[1] about a third of which was occupied by sanctuaries, may be explained by their special character. The spacious frontage of the 'Unexplored Mansion', indeed, behind the latter building still, however, suggests that the Western slope that included the plateau of Hellenikà was the site of a specially sumptuous quarter.

Estimates of house dimensions.

Apart from this favoured quarter we have thus, so far as the results of excavation go, to deal with two main classes of habitation in the area immediately surrounding the Palace at the opening of the New Era. A series of houses conforms so nearly to the dimensions of 220 metres apiece that it looks as if there had been some legal enactment of a sumptuary

Were the sizes of houses legally graded?

[1] The entrance system is wanting in the 'Little Palace', but, apart from that, the superficies amounts to about 975 square metres.

nature, fixing the maximum size of their dwellings for different classes of citizens. We have seen that the 'House of the Frescoes' had an area of only 130 square metres, and the neighbouring house immediately East of it, the ground-plan of about half of which was brought out, seems to have approximated to it in size. It is quite possible that this smaller class of habitations, which were little more than half the size of the others, may have been really the more numerous.

Estimate of number of 'residential houses' and of burgher population.

Reckoning the mean area of the above two classes of houses as about 175 square metres, and adding, as is necessary, a certain amount for the share of each individual house in its narrow surrounding space, we may tentatively reckon the average space occupied by a single house as 200 square metres. Taking the area in which, according to existing indications, good town-houses were built round the Palace as roughly amounting to 400,000 square metres, this space would have accommodated some 2,000 houses of the classes of which examples have been recovered. When it is remembered that the normal type of dwelling was of two or more stories, it may not be over the mark to estimate the number of inhabitants in each as eight persons, which would give a total of 16,000. Some proportional reduction should be made, however, for the Palace area itself, and the more spacious arrangements postulated for the 'Quartier St. Germain' on the West Hill. On the whole, it would be probably safe to reckon the well-to-do burgher population of this central region of Knossos in the first half of the sixteenth century B. C. as not less than 12,000 souls.

Poorer Outlying Zone.

Poorer quarters compared with provincial agglomerations in blocks.

According to the provisional estimate of the total original extension of the Minoan settlement as shown in the Plan, opp. p. 547, an exterior zone of about three times the same area would remain to be accounted for in which *ex hypothesi* the dwellings were on a humbler scale. It seems reasonable to suppose that in this area the more primitive system of construction, as illustrated by the Late Neolithic house of the Central Court, had in some measure survived, and that the houses of this outer zone were agglomerated in blocks separated by narrow streets and lanes, like those of the provincial towns and villages, the plans of which have been unearthed at Palaikastro and Gournià, and of which a parallel Cycladic example is afforded at Phylakopi.[1]

[1] In the First and Second Periods of Phylakopi we see much the same block system with narrow lanes between as at Gournià (see Plan by Mr. T. D. Atkinson in *Excavs. at Phylakopi in Melos by the British School at Athens*). A simple 'but and ben' plan here continually occurs as a unit, the size of separate house plans of this kind ranging from about 60 to 15 square metres. In the Third Period there is a similar arrangement in blocks, largely

Unfortunately, in the case of Palaikastro, where considerable variation is observable in the size of the buildings, it is in many cases impossible to ascertain their individual limits. In the case of Gournià, however, the blocks convey more precise information. A dozen houses there, which it has been possible to delimit, range in area from about 120 to 50 square metres or less, giving an average size of about 80 square metres, to which only a very small amount need be added for the individual share in the alley space. In other words these habitations were somewhat less than half the size estimated for better class houses at Knossos.

Rough Estimate of Population.

Denser population of poorer quarters.

If at Knossos, as a basis for calculation, we estimate the poorer outlying quarters of the town as having covered three times the area of that occupied by the prosperous burgher class it is clear that, according to the analogy supplied by Gournià, we must allow for a very large total population. The number of occupants in relation to the size of the houses would certainly have been greater than in the more favoured area. Habitation may, of course, have been less continuous throughout this poorer zone, but at the same time there may well have been suburban spurs beyond it, especially on the routes leading to the harbour town.

Overwhelming preponderance of poor interments in Zafer Papoura Cemetery.

It is well known that in any urban community the number of the poorer inhabitants is apt, even under the most favourable conditions, largely to out-number that of the well-to-do. In the Zafer Papoura Cemetery, out of exactly one hundred graves explored, not more than five could with any probability be attributed to individuals in easy circumstances. These exceptional cases were the large vault containing a tripod hearth and a fine deposit of bronze vessels (No. 14),[1] the Chieftain's Grave (No. 36)[2] with its splendid gold-plated and engraved swords and necklace of gold beads, and that of another warrior also containing two fine swords (No. 44),[3] to which may be added Grave 7 with its gold ring and necklace and ivory boat,[4] and No. 99, exhibiting a varied group of objects.[5] Zafer Papoura being an outlying Cemetery, this proportion of 5 per cent. for well-to-do tombs may be considerably below the general average, but it still gives us a true indication of the existence of a poorer outer zone, relatively more populous.

The poorer quarters of the town have been here estimated as covering

inherited, so far as the main gangways go, from the earlier Age. This is the Late Minoan III Plan, distinguished by its Palace of Mycenaean type (= *c.* 314 square metres).

[1] A. E., *Prehistoric Tombs of Knossos* (*Archaeologia*, lix), p. 34 seqq. and Fig. 33.

[2] *Ibid.*, p. 55, Figs. 58, 59.

[3] *Ibid.*, p. 62, Fig. 60.

[4] *Ibid.*, p. 25, Figs. 20–3.

[5] *Ibid.*, p. 87, Figs. 100, 101.

about three times the area of the City proper. Assuming a density of population only twice as great it would still amount to some 70,000 souls. Together with the 12,000 burghers, we thus reach a total of 82,000.

Unique centre of human habitation.

If to this is added the considerable harbour town that stood to it in much the same relation as the Piraeus does to Athens, Minoan Knossos in its great days was a centre of human habitation to which no rival, certainly, could have been found on the European side. Mycenae as a great and civilized city was only just in the making at the hands of Minoan conquerors and colonists. The position of Knossos must have been in many respects unrivalled even on the East side of the Mediterranean basin. No fenced city, surely, on the Syrian coast, shut in by walls and with its fields the constant prey of the passing invader, had either its expanse or its population.

Estimated population of Minoan Knossos.

Without endeavouring to attain any too precise results, we may yet, on the basis supplied by the existing remains and the comparative materials, conclude that the Minoan town of Knossos at its most flourishing period, including its haven, had held a population not much, if at all, under a hundred thousand souls. It would be easy to reach a still higher computation.

Primitive Mainland centres like Dimini compared.

Rude civic settlements there certainly were both in the Morea and in Northern Greece, such as that of which a good specimen is afforded at Dimini in Thessaly, with an inner walled enclosure or acropolis, surrounded by an outer zone of agglomerated habitations and two rings of ramparts beyond.[1] It looks, indeed, like a distant and more barbaric reflection of the early cities of Troy, and here, as there, and again in the early town of Phylakopi in Melos, we can trace the repetition of the primitive 'but and ben' type of dwelling which Crete had already largely outgrown by the opening of the Middle Minoan Age. So far as its excavated remains go, the Helladic stronghold of Aegina, though fortunate in its insular position, and, from M. M. II at least, in contact with Minoan Crete, repeats much the same story as Dimini.

Originality in Design of Houses of New Era: Untrammelled Development.

Variety and originality of Knossian houses.

Freed from the need of encircling walls by the security bred of sea-dominion, Knossos in the great Age of Palaces had enjoyed a period of untrammelled expansion. After the great havoc caused by the earthquake towards the close of the Third Middle Minoan Period, the *tabula rasa* thus effected was turned to account for house-planning schemes that in certain respects conform to quite modern ideas. Many of the intervening lanes

[1] Chr. Tsuntas, Αἱ *προϊστορικαὶ ἀκροπόλεις Διμηνίου καὶ Σέσκλου*, Pl. 2. Compare, too, A. J. B. Wace and M. S. Thompson, *Prehistoric Thessaly*, pp. 79–81 and Fig. 28.

continued to be irregular, following the drainage channels and perhaps a system of water-supply inherited from the earlier Middle Minoan phase. But the individual houses, themselves, show a variety and originality of design hardly paralleled in the Ancient World. Not only, moreover, do we notice a great diffusion of wealth, but such an example as the 'House of the Frescoes' shows that even the less wealthy of its burgher class had cultured tastes and were acquainted with letters. Nor can anything give a better idea of the comforts of contemporary travel than the 'Caravanserai' or Rest House near the abutment of the Great South Road, with its elaborate system of baths and water-supply and its elegant room for refection, round which ran the appetizing frieze of partridges.[1]

Cultured taste of occupants.

Signs of Timber Shortage—Symptom of Deforestation.

It is clear that in these spacious days the amenities and conveniences of life were considerably increased in the great Minoan centre. In one direction, however, the exceptional drain on material entailed by the new activities was beginning to produce an effect on construction, already noted, which, though so far of no great importance, was of ominous significance.

In the earlier M. M. III work the inner structure of the interior walls of buildings is divided into distinct compartments of solid masonry by timber framing. This is often of a very massive kind—the woodwork, especially in the case of the upright posts, going right through the masonry. From the beginning of the 'New Era' onwards, however, there is perceptible a greater tendency to economize in timber. The upright posts in interior walls are often wanting, or, as in the case of some contemporary constructions at Tylissos, are more or less superficial insertions in the wall face on either side. The horizontal beams, though these are more generally preserved, are of less calibre. A parallel phenomenon is also observable in certain door-jambs. Whereas, according to the regular method handed on from the Middle Minoan Age, the door-jambs were of wood, backed by rubble masonry, on a gypsum footing with reveals, instances, as we have seen, now occur, of door-jambs formed of a solid mass of gypsum.[2]

Diminished use of timber construction.

The substitution of stone for wood in these and other cases and the diminution, above noted, in the woodwork of interior walls may be taken to point to a growing scarcity of timber. It is highly probable, as I have elsewhere suggested, that a main cause of the downfall of Minoan dominion is to be sought in the gradual deforesting of the island. The docks may have had to draw most of their timber supply from overseas.

Symptom of deforestation.

[1] See above p. 109 seqq. and Coloured Plate VIII.

[2] See p. 518, Fig. 319.

The 'Broad Knossos' of Homeric Tradition.

Epic tradition of 'Broad Knossos' verified.

It will be seen that the epic tradition of the great extension of Knossos corresponds in a remarkable manner with a marked feature of the Minoan town. The Homeric description—*εὐρεῖα Κνωσός*[1]—'Broad Knossos', is specially distinctive as compared with the fenced-in cities of Mainland Greece. Of the populousness of Knossos again, 'the Great City', we have a true record in the famous passage of the *Odyssey*, where the 'Ninety Cities' of Ancient Crete are mentioned.[2] A contemporary illustration of this has, indeed, been preserved in the scenes of the Miniature Frescoes illustrated below,[3] showing the densely packed crowds of the Grand Stands and of the area below. In the parts of the frieze that it has been possible to set together, the number of persons actually represented, by a kind of pictorial shorthand, above and beneath the central shrine and in the first section of the stands on either side, would have amounted to some six hundred men and over eighty women. This must be only a fraction of the whole.

Great crowds on grand stands of frescoes.

Knossos already populous centre in Neolithic times.

The populousness of Minoan Knossos was itself, indeed, an inheritance from immemorial time. It has been shown above that in early Neolithic times a human settlement occupied the later Palace area and its surroundings, extending on one side towards the Kairatos and on the other along the edge of the Vlychià ravine beyond the point where the 'Great South Road' spanned it in Minoan times. The successive strata of this, which descend in places 8 metres beneath the earliest Minoan, largely account for the formation of the 'Tell' of Kephala itself on which the Palace stood[4] and exceed in volume those of any known Neolithic site on European soil. Remains of the Later Stone Age also abound along the sea front of the Harbour Town.

Widespread Evidences of Building Activity in New Era: Uniform Architectural Models.

General contemporary outburst

The building activity that marks the great restoration at Knossos that followed the seismic catastrophe seems to have left its mark through a large part of the Island. There are indications of the erection of well-built

[1] *Il.* xviii. 593. The same epithet is, however, applied (*Il.* ii. 575) to the Achaian Helikê.

[2] *Od.* xix. 173–4, 178:

ἐν δ' ἄνθρωποι
πολλοί ἀπειρέσιοι καὶ ἐννήκοντα πόληες . . .
τῇσι δ' ἐνὶ Κνωσός, μεγάλη πόλις·

Cf. *P. of M.*, i, and, on the interpolation to the passage, Beloch, *Origini Cretesi* (*Ausonia*, iv (1910)), pp. 220, 221.

[3] See below, p. 597, Fig. 371 and the Coloured Plate in Vol. iii. These, however, only illustrate the central section of the frieze.

[4] *P. of M.*, i, p. 34 seqq., 'The "Tell" of Knossos', and see above, p. 2 seqq.

houses in the Harbour Town of Knossos itself, and the neighbouring site of Tylissos is distinguished by a noble group of mansions.[1] They are of about the same size, standing well apart from one another, that to the West, which is of a simple oblong shape,—21·5 metres by 16,—being about a third larger than the South House at Knossos. At Niru Khani, again, the haven to the North-East of Knossos—the fine 'House of the Propaganda' above described[2]—is of contemporary date.

of building activity.

Mansions of Tylissos and Niru Khani.

Of the outburst of building activity at this epoch, which may be taken also to include the earliest phase of L. M. I, there is abundant evidence throughout the whole of the Eastern part of the Island. The later towns at Palaikastro and Zakro and that at Gournià belong to this time. In the two former sites mansions occur comparable to those described about the Knossian Palace. In the remains of House A at Zakro,[3] where clay seal-impressions occurred in association with M. M. III *b* vases, and, again, in two others,[4] we meet with the familiar Pillar Crypts of the Minoan domestic cult. The house described as Block J, of which the square ground-plan has been completely brought out, covers an area of about 300 square metres, and the similar ground-plan of C is only a little less.[5]

Similar phenomena at Zakro and Palaikastro.

The finest house at Palaikastro—'House B'[6]—which is still larger[7] (see Plan, Fig. 354)—also goes back to the close of M. M. III,[8] though modified in L. M. I. The earlier entrance of this house, at 12, had been blocked, and another (8) opening directly into the Court, on the harbour side, had been substituted, with a little niche for a doorkeeper's bench, such as occurs elsewhere. The Court itself is of special interest from the fact that it presents the remains of a verandah with alternating round and rectangular pillars, recalling those of the Central Court in the Palace of Mallia. Of great importance, too, is the principal chamber or Megaron (6)

[1] J. Hatzidakis, Τύλισσος Μινωϊκή ('Αρχ.'Εφ., 1912, p. 197 seqq.): fuller plans are given in his article (translated by L. Pernier) in *Ausonia*, viii, Pl. 3.

[2] See above, p. 281 seqq. and Fig. 167.

[3] D. G. Hogarth, *Excavations at Zakro, Crete*, *B. S. A.*, vii, p. 131: Plan.

[4] *Ibid.* 'Block E' and p. 138, 'Block J'.

[5] *Op. cit.*, p. 138. C measures 17 by 16 metres.

[6] R. C. Bosanquet, *B. S. A.*, viii, pp. 310–16 and Fig. 23; see, too, Pl. XX. In the Plan, Fig. 354, note has been taken of some supplementary observations of Professor Bosanquet, *B. S. A.*, ix, pp. 287, 288.

[7] Its total area amounts to about 488 square metres.

[8] Thus at the West end of Room 13 part of a later wall was removed exposing a face of well-finished small ashlar masonry coated with white plaster and identical, as Professor Bosanquet observes (*B. S. A.*, ix, p. 278), with that of a small house shown by the pottery found in it to be as old as the Middle Minoan period.

Mycenaean 'Megaron' plan of four columns

with four column bases at the corners of a slightly sunken central square of the pavement. This arrangement, repeated in the case of the house (18) of a neighbouring block,[1] recalls the Megaron plan of Mycenae and Tiryns, but in this case there was no fixed hearth. The absence of a drain, and the

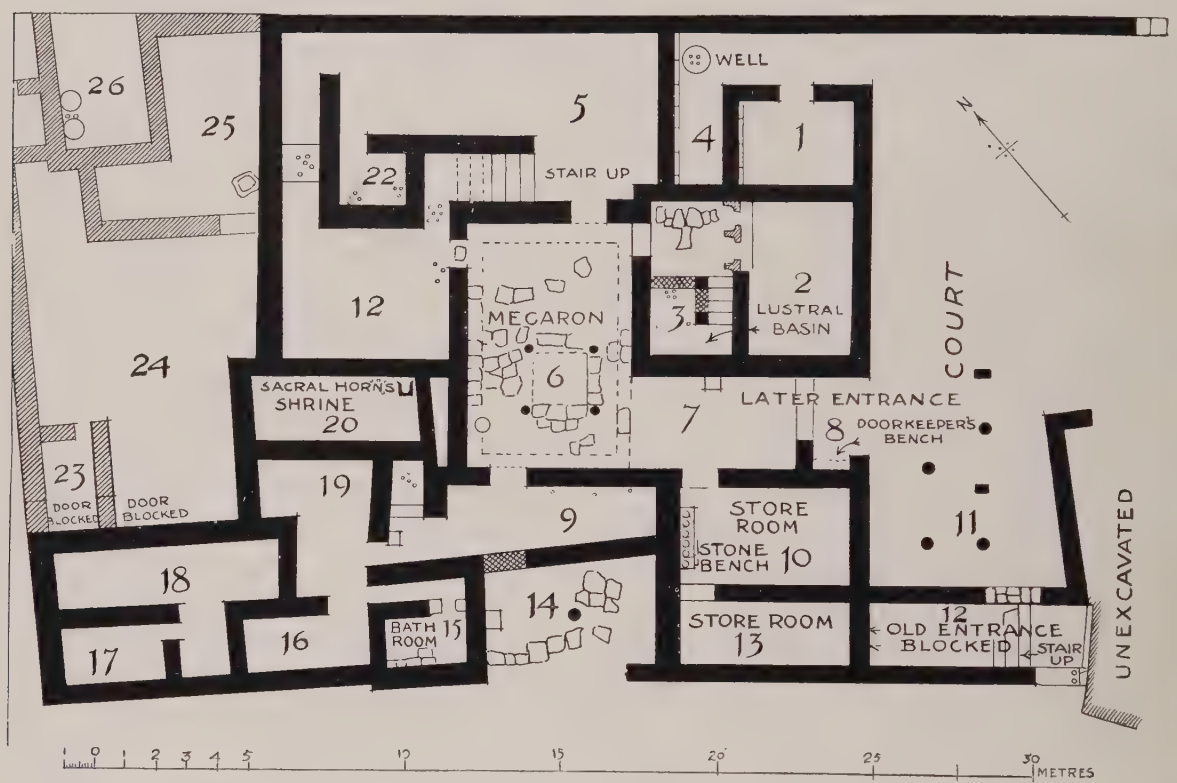


FIG. 354. PLAN OF 'HOUSE B' AT PALAIKASTRO.

round central square.

provision of just as much sunken space as might prevent the slight splashing in of rain-water from inundating the whole floor, point to some kind of clerestory arrangement, and a movable Minoan hearth may well have been set below it.

This house, built in the extreme East of the Island, might, so far as its structural and internal arrangements go, have been excavated on the site of Knossos. Amongst familiar features we note a closet for a domestic shrine (20), containing stucco 'horns of Consecration', a bathroom (15) on the level, and also a typical example of a 'lustral basin', with its balustrade and descending steps, approached through a double doorway.

[1] See Plan, *Palaikastro Excavations* (*Suppl. Paper of B. S. A.*, pt. i, 1923), Pl. I, Block Δ.

The Golden Age of Minoan Crete.

On all hands there is evidence at this time of a great diffusion of wealth. In some cases this is attested, not only by the general sumptuous- Great diffusion of wealth.

Fig. 355. Hoard of Huge Bronze Cauldrons from Magazine of 'East House', Tylissos (J. Hatzidakis).

ness of the architectural remains, but by actual relics that have survived destruction and treasure hunting. The Little Palace of Hagia Triada, which belongs to this era, contained a hoard of nineteen bronze ingots, each approximately answering to a light Babylonian talent. In the central mansion of the group at Tylissos was also found a magnificent hoard including, Bronze hoards of H. Triada, Tylissos, and Knossos.

besides a bronze talent, four enormous bronze cauldrons,[1] one of which attains a diameter of 1·40 metres and weighs fifty-two kilograms (Fig. 355). An interior view of one of these is given in Fig. 356, showing how the plates were put together. A series of bronze hoards that came to light in the houses at Knossos will be described below in connexion with the still more important treasure found in the North-West 'Treasure-House', and the elegant silver service from the South House has already been illustrated.

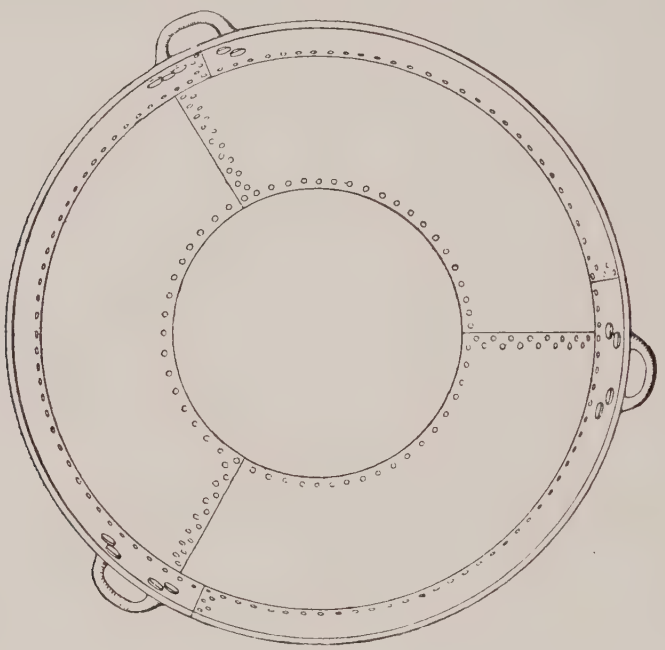


Fig. 356. Interior View of Bronze Cauldron from Tylissos.

Uniformity of architectural and cultural types.

In the extreme South and the extreme East of the Island there constantly recur forms of domestic and religious construction so like those of Knossos that in many cases they might have been devised by a single architect. The artist who painted the friezes of the 'House of the Frescoes' may well have executed those of Hagia Triada, so identical are many of them both in style and details. Official sealings, identical with those of Zakro but composed of the clay of another East Cretan district, were found in the harbour town of Knossos.[2] Everywhere at this epoch we meet with signs of intensive intercourse and a conformity of cultural forms that finds its explanation in the methodical extension of the Minoan system of built ways to the remotest districts.[3]

[1] See J. Hatzidakis, Τύλισσος Μινωϊκή, pp. 220, 221 and Figs. 29, 30.

[2] See above, pp. 254, 255 and Fig. 149.

[3] See above, p. 79 seqq. and pp. 91, 92.

Indications of central control.

In Crete itself some superior sway may well have been wielded by a Minoan dynasty, and the general agreement that we find in all the externals of life throughout a wide area of the Island—perhaps best illustrated by the diffusion of the advanced Linear Script (A)—speaks in favour of some central administration and organization. But at this time at any rate the Priest-Kings seem to have exercised a beneficent dominion.

The Golden Age of Minoan Crete.

Whether or not in part due to some fresh seismic disturbance, a considerable destruction is observable, not only on the town site of Knossos itself but throughout a considerable part of Eastern Crete, at the close of L. M. I *a*. Overseas conquest and migration to Mainland sites may also have caused an unfavourable reaction in Crete itself.[1] But the transitional epoch, marked by the great restoration and revival at the close of M. M. III and the beginning of the succeeding Period, is the true Golden Age of the Island.

Comparison with *Pax Romana*.

Never again till the Roman Governors put a final stop to the internecine feuds of the Greek cities did Crete enjoy throughout its length and breadth such uniform prosperity. The evidence of this is to be seen in the spacious villas and town-houses, in the many signs of domestic comfort and cultured tastes—including even a knowledge of letters—in the diffusion of civic settlements, accompanied by skilled town-planning and advanced hydraulic and sanitary engineering. There is much in all this that recalls to mind the general well-being fostered by the *Pax Romana* in the best days of the Empire.

[1] See below, p. 625 seqq.

§ 57. State Approach to Palace from North and West: 'Royal Road' and 'Theatral Area'.

Discovery of the 'Royal Road'—its structure and course; Built drains in connexion with it; Roman causeway on upper level; 'First European Road'—inverse arrangement; A Minoan Street; 'Magazine of the Arsenal'; 'Theatral Area'; Pavement of earlier Court below and walled refuse pit; Probable existence of earlier Stepped Area of Phaestian type; Structure of 'Theatral Area'—its partial reconstitution; Presumed hall East; Descending runnel with parabolic curves; Southern steps of area; Enclosed by wall on West side; Area not for large performances; Room in 'Theatre' for about 500 spectators; Performance there of Cretan dance; Probably mainly a Reception area; Chief entrance above, on Palace side; Paved way heading for North-West Corner Entrance and West Court.

For the most part, as we have seen, the houses of what has been called the 'Residential Quarter' of Minoan Knossos were separated from one another, even in its most flourishing days, by narrow winding passages and alleys. The main road that led to the harbour town on one side, and on the other found its prolongation in the 'Great South Road', doubtless formed a broader thoroughfare, but there was, besides, an exceptional line of way, more or less at right angles to this, altogether much more suggestive of modern town-planning.

The 'Royal Road'.

Discovery of 'Royal Road'.

This is the straight line of paved way that leads from near the South-East Angle of the 'Little Palace' to the main reception area of the Palace itself.

Its discovery was due to the appearance of two converging lines of causeway, one running from the middle of the 'Theatral Area', the other cutting its South-West angle, which were followed to the point of junction, where the road proper began.[1] This, in turn, was traced about 170 metres as far as the course of the modern road to Candia.[2] A test-pit, moreover, dug on the hill-side about 60 metres beyond this, in a line repre-

[1] A. E., *Knossos, Report*, 1904, p. 45 seqq.

[2] About 40 metres from the Eastern end the actual paving of the road was broken away for a distance of about 23 metres, but the cement wings were still traceable at intervals.

FIG. 357.. MINOAN PAVED WAY (THE 'ROYAL ROAD'), LOOKING TOWARDS 'THEATRAL AREA'.

senting its exact continuation, brought to light similar paving,[1] so that we have evidence of the existence of a Minoan roadway running for a distance of at least 235 metres due West from the point of junction of the two causeways near the entrance to the 'Theatral Area' (Fig. 357). At the point of intersection with the modern road there were traces of a branch line leading North-West, and it was the clue thus afforded that led, after much deep excavation, to the discovery of the 'Little Palace'.[2]

The structure of this roadway will be best understood from the Plan, Fig. 358, and the typical section, taken near its Eastern end, given in

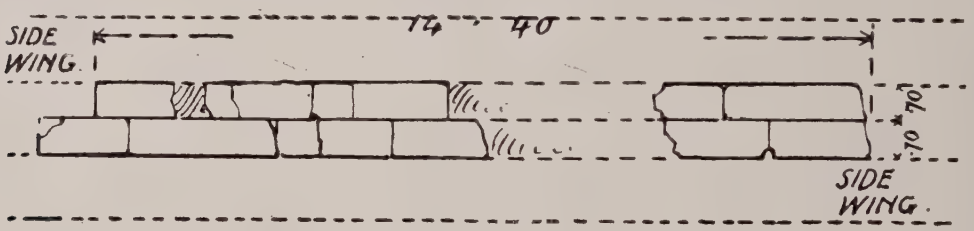


Fig. 358. Plan of Part of Paving of Minoan Way.

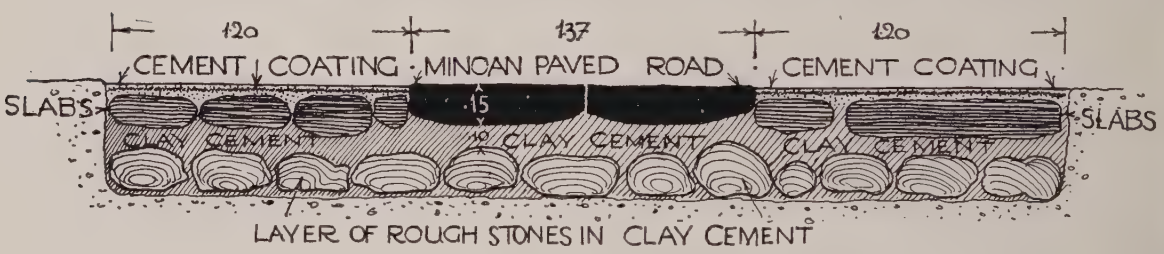


Fig. 359. Section of Minoan Paved Way (the 'Royal Road').

Its structure and course.

Fig. 359.[3] Its central slabbing—the continuation of that of the two stone causeways—averaged about 1·40 metres in width,[4] and on either side of this were two wings, each about 1·20 metres wide, with a concrete facing, consisting of small pebbles, clay, and pounded pot-sherds, and with a hard beaten surface, the whole laid on a foundation of rough stones. At the base of the road material was a further foundation of rough blocks resting on an excavated surface of the ground, about half a metre down, and the interstices

[1] The depth of the paving here was 4·55 metres below the surface. Owing to the rise of the hill it was above the level of the section East of the modern road.

[2] See above, p. 513 seqq.

[3] Drawn by Mr. Piet de Jong. Compare, too, the section, Fig. 361, which, however, does not show the blocks supporting the cement face of the wings.

[4] Each line of slabs was about 70 cm. in width. They were of varying length up to about 2·80 m.

FIG. 360. MINOAN PAVED WAY ('ROYAL ROAD'), LOOKING WEST; SECTION OF ROMAN CAUSEWAY SEEN ABOVE.

were filled with clay cement (see Fig. 359). Throughout a large part of the course of the road a built drain was traceable along its South border, the sherds in which were of M. M. III *b* and L. M. I *a* date, an interesting indication that this road, too, in its present form, was the work of the great epoch of restoration.

From the modern road, which approximately follows the line of the old through route from South to North, there is a slight incline East and, from the bottom of this, again, the Minoan paved way made a gradual ascent towards the 'Theatral Area'. It was along the bottom of the little dip in the ancient contour of the ground that the M. M. I *a* built drain, associated with the early house foundations described above,[1] ran Northwards, passing under the later roadway. The excavations of 1926 showed that the small stone-slabbed drain that descended East along the Southern flank of the Minoan paved way[2] had been carried above the older *cloaca*, at the point at which it ran under the foundations of the road. It thence proceeded by a transverse channel beneath the road pavement, at a higher level than the other, towards the Eastern border of the 'Magazine of the Arsenal', there brought to light, the line of which it followed Northward.

Built drains beside road.

Curiously enough, a narrow Roman roadway, entirely paved with mere cobbles set on the surface of the ground, was discovered at a height of somewhat over two metres above the Minoan Way (see Fig. 360 and Section, Fig. 361) running almost in the same direction. This correspondence in direction, however, was a mere coincidence. That all tradition of the earlier road had long before ceased was shown by the underlying Greek Geometrical stratum—a well of that Period having been actually sunk through the Minoan pavement.

Roman causeway on upper level.

It may be truly said that in this Minoan paved way we have the first well-preserved European example of road-making on scientific principles. At the same time the arrangement here brought to light is the inverse of that usual in a modern road. Unlike the Roman and later roads it shows no camber, and in this case the pavement that we should associate with foot-passengers is in the middle, while the concrete surface is at the sides. The explanation of this, however, is not far to seek. Though there is evidence that the knowledge of the thoroughbred horse was coming into vogue at the beginning of the Late Minoan Age, and though there was on

European road: inverse arrangement.

[1] See above, p. 366 seqq. and Figs. 203, 204.

[2] In this drain was found the fragment of a bull's head 'rhyton' of the same form as that from the 'Little Palace'. The pottery contained in the drain was M. M. III *b*–L. M. I *a*.

the roadway itself a Magazine in which clay tablets of L. M. II date were found referring to the royal chariots and horses, no traces of wheel traffic were here discernible. The particular form of the road, with its central paving-slabs seems, to have been mainly planned—as indeed were the earlier

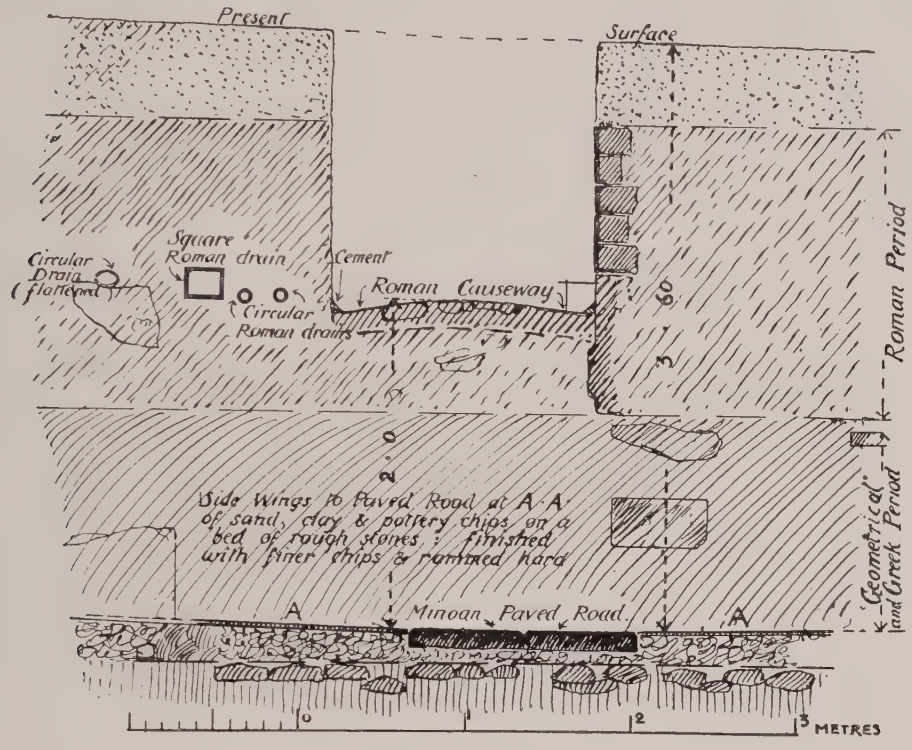


FIG. 361. DIAGRAMMATIC CROSS-SECTION OF MINOAN PAVED WAY SHOWING SECTION OF ROMAN CAUSEWAY ABOVE.

raised causeways across the Palace Courts—for the more ancient method followed in the transport of persons of distinction, namely, by means of palanquins.[1] The central pavement marks the section of the roadway that had to stand most use and along which the bearers and pack animals passed. The importance of this feature in the construction of the Minoan pavement is the more evident if we regard the road as having something of a sacred character. The religious functions served by a large part of the Little Palace have been already indicated, and from this point of view it may be looked on as a kind of annexe of the greater Palace Sanctuary. Palanquins would here have been specially requisite for ceremonial progresses, and the

Minoan palanquins.

[1] See above, p. 158 and Fig. 80, and the restoration of the 'Priest Fresco', p. 772 below.

Papa Re himself may have been transported along this route in his *sedia gestatoria* from one Palace Sanctuary to another.

A Minoan street.

It was truly a 'Royal Road', but at the same time it must have formed a regular street, traversing the central district of the town from West to East. The evidence of its continuation due West, up the lower part of the slope beyond the modern highway, may well point to the former existence of some exceptionally important building at that end. Westwards from the modern road its course is marked by a series of wall stumps belonging to Minoan town-houses, including on the North side the 'Magazine of the Arsenal', already referred to, the principal contents of which concern the later part of this work dealing with the last Period of the Later Palace (L. M. II).[1]

'Magazine of the Arsenal.'

The 'Theatral Area'.

The 'Theatral Area'.

The historic imagination calls up a vision of solemn processions, of divine effigies and of Priest-Kings, borne aloft on portable thrones, and followed by their worshippers and acolytes, wending their way along this *Via Sacra* between the lesser and the greater Palace Sanctuaries. Foreign princes and envoys—who would have reached Knossos by the main high road that linked the North and South of the Island—were also, we may believe, transported along the same 'Sacred Way', heading straight for the stately Reception Area, the central causeway of which, crossing its level inner rectangle, was in fact, as we have seen, a continuation of that of the Royal Road itself.[2] At the point where this paved pathway, the width of which is about 1·50 m., reaches the lowest step of the Eastern flight of this Area a section of another similar path with good paving follows this step Northwards. It must originally have communicated with a small passage way running out of the Area in that direction, but all traces of such a pathway proceeding Northwards have disappeared.

The later structure here visible was essentially theatral in its arrangement, the tiers of steps, however, being only on two sides—East and South. These rise from an oblong space, the rough pavement of which, on either side of the central causeway, was originally covered with hard plaster, doubtless, as in other cases, presenting brilliant coloured decoration. (See Plan and Section, Fig. 362 and general view, Fig. 363.)

This arrangement, it will be seen, answers in its essential features, though on a smaller scale, to that of the early Palace at Phaestos,[3] and is also

[1] See Vol. iii.

[2] For the 'Theatral Area' and its excavation, see A. E., *Knossos, Report*, 1903, p. 99 seqq.

[3] Luigi Pernier, *Scavi della Missione Italiana a Phaestos* (*Mon. Ant.*, xii, 1902, pp. 33, 34 and Plan). See also his *Lavori e seguiti*

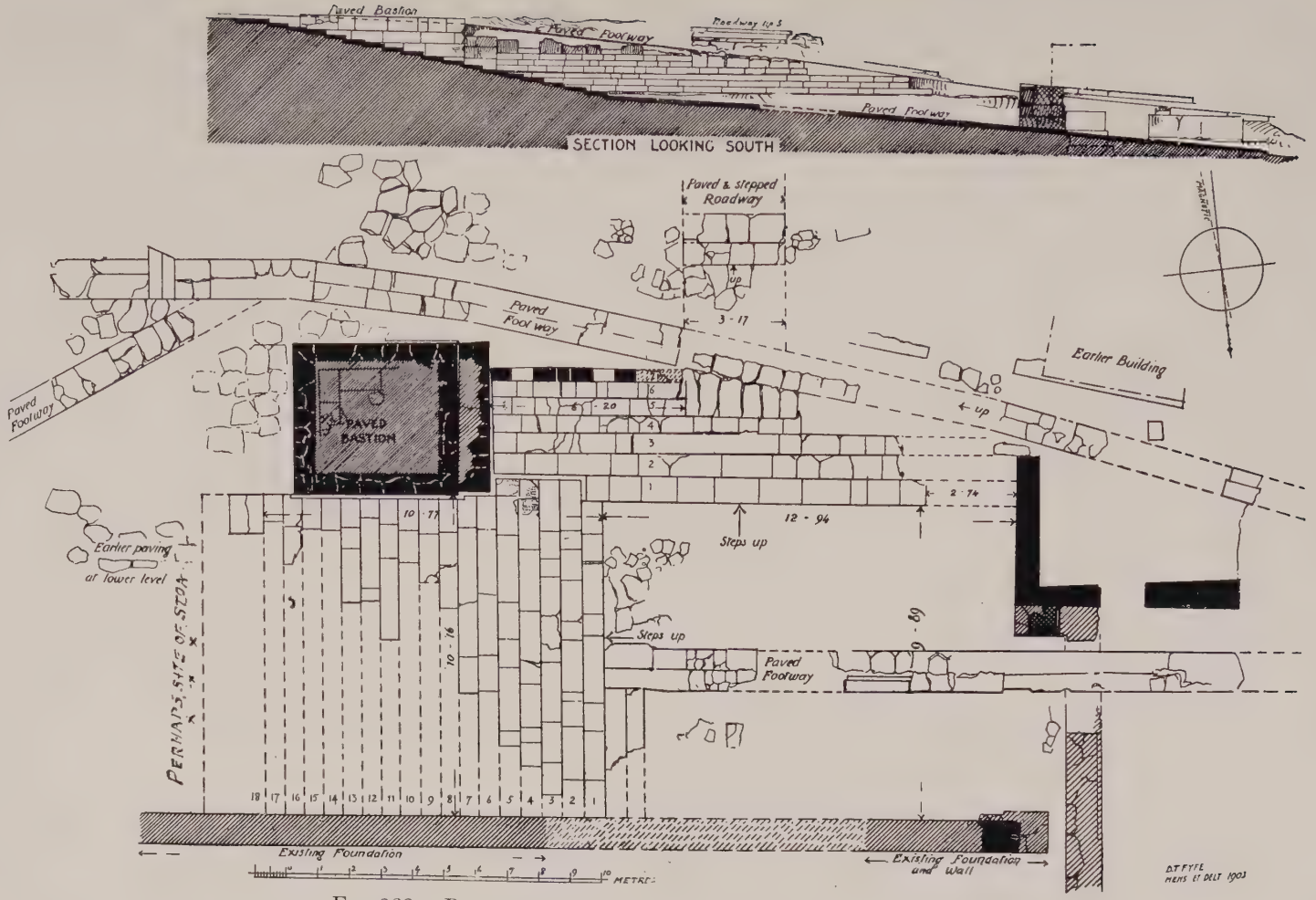


FIG. 362. PLAN AND SECTION OF STEPPED 'THEATRAL AREA'.

traceable in a lesser degree outside the chief building of Gournià.[1] At Phaestos, facing the original West Court, there rises a broad flight of nine steps approached diagonally by a causeway (one of two converging lines), in connexion with an early West Portico. The steps in this case are surmounted by a long paved platform, originally backed by a massive wall supporting an upper terrace.[2] Backed as they were in this way, they could not have been an approach to any larger hall beyond, and they no doubt served as seats for numerous spectators who could thence look on at sports or religious functions in the area below. The 'Theatral Area' of Knossos in its later shape may be taken to represent, on a less massive scale, an earlier monumental arrangement, which, there too, went back to the days of the early Palace. Indications, indeed, of the existence of this are not wanting.

Pavement of earlier court below and walled refuse pit.

Supplementary excavations made by me in 1913, North of the central causeway, where the pavement had been much disintegrated owing to the fact that it was underlain by made earth, threw a new light on the earlier history of this area. At a depth of 1·10 metres beneath the original level of the later pavement, massive limestone slabs of irregular outline, belonging to a more ancient pavement, made their appearance, and these were found to border a circular walled pit, about 6·70 metres in diameter, resembling the 'Kouloura' of the West Court and that beside the great entrance Court at Phaestos. The circuit of this extended beyond the North wall of the 'Theatral Area', the foundations of which were sunk into it. In the section of this walled pit, beneath the later pavement, where its contents were undisturbed, the last ceramic elements, according to my observations, belonged to the closing phase of M. M. II *a*.

Further supplementary researches made beyond the East border of the 'Theatral Area' confirmed and amplified these results. The massive early pavement was found to extend beyond this for a length of over ten metres, and there were also remains of a causeway of the same date made of large slabs running parallel to the line of the later paved way, visible at a higher level, a little West of it (see Plan, Fig. 366, at end of Section). We have here evidence of the existence of an extensive paved court on the borders of the North-West Palace precincts of the same approximate date as the early West Court of Phaestos and provided with a similar walled refuse pit

nel Palazzo di Phaestos (*Rendiconti della r. Accad. dei Lincei*, Marzo-Luglio, 1903). For a view of the Court see *P. of M.*, i, Suppl. Pl. II.

[1] Cf. Boyd-Hawes, *Gournià*, p. 15, Plan.

[2] One feature of the Phaestian arrangement not observable in the 'Theatral Area' at Knossos is the continuation of the causeway in a line of steps ascending the long stone seats in a manner of a *diazoma*.

or 'Kouloura'. It is highly probable that this Court, too, was bounded on two sides by some stepped arrangement like that of the Phaestian Palace, the predecessor in this case of the more restricted 'Theatral Area' of the New Era. The Southern tiers of the latter, perhaps, with their higher and more massive steps, were in part, at least, a survival of this earlier structure. The evidence, however, does not end here. It is clear that there was also a later Court, still anterior to the construction of the Eastern flight of steps. East of these, at a higher level, corresponding with that of the paved area West of the steps, were traces of the continuation of that area Eastwards, accompanied by lines of paved path, which therefore must have run under the Eastern flight (see plan, Fig. 366, p. 587). The evidence of pottery found immediately above it tends to show that this later pavement itself dated from the closing phase of M. M. II, and with it probably the same general arrangement of a North-West Palace Court, representing the earlier one at a higher level.

Structure of 'Theatral Area'.

The East flight at Knossos consisted of eighteen low steps, 10·60 m. broad in the case of the lower tiers, as compared with 13·70 metres in the case of the Eastern flight at Phaestos, which has ten steps. In the present case the steps from the eighth onwards were somewhat restricted by the bastion and are only 10·16 m. wide. As the total height of the flight was approximately 2·20 metres the average tread of the steps was only about twelve centimetres. Unfortunately, owing to the original slope of the ground, the North-Eastern section of this flight had rested on made earth, the sinking of which had led to the disintegration or to the entire disappearance of the slabs on this side, which in fact were only wholly preserved in the first two rows. As, however, the lower courses of the supporting wall on the North were mostly preserved, it was possible, after undertaking the somewhat serious work of rebuilding the upper part of this, to restore and reconstitute the whole of the steps and the platform above throughout this section at their original level, and thus permanently to preserve the original effect of this monumental structure (see Fig. 363).

Partial reconstitution.

Supposed hall East.

At the top of this Eastern flight the final tier widens into the paved platform of what may have been some kind of hall or *stoa*. It could not, in any case, have had any considerable depth, since a diagonal line of Late Minoan causeway which starts from the main line running East would have cut into it about ten metres behind the Western edge of the paved platform. Moreover, on a line parallel with this platform edge and about nine metres East of it, wall foundations came to light which apparently mark its original limit (see Mr. Fyfe's Plan, Fig. 366, at end of Section).

Bastion for 'Royal Box'.

On the South this flight was bounded for part of its extent by an oblong bastion of good limestone masonry,[1] 5·25 metres E. to W. by 4·80 N. to S. The upper surface of the bastion showed remains of good paving, on a level with the topmost step of the East flight, and near here were found some fragments of painted stucco. It looks as if this raised platform may have been surmounted by a decorated canopy. From its commanding position between the two flights of steps it was the point best adapted for surveying any shows that may have taken place in the area below, and we may perhaps regard it as having served as a kind of Royal Box.

Descending runnel with parabolic curves.

Along both sides of this structure ran small runnels which present the remarkable feature of descending in parabolic curves. This feature, it will be shown, has considerable chronological value, since stratigraphic evidence supplied by the East Wing of the Palace enables us to assign it to the beginning of the New Era. It is best illustrated by the East Bastion of the Palace,[2] in connexion with which attention will be called to the extraordinary hydraulic knowledge revealed by this parabolic method.

Southern steps of area.

On the Southern side of the paved area was another flight of steps wider than the other but fewer in number (Fig. 364). Its upper part is divided into two by the pavement of an ascending roadway 3·17 metres in breadth, and if we may assume that the section West of this, the end of which is incomplete, was originally of the same dimensions as the other, it would have had a width of about 15·50 metres. A remarkable feature of the Eastern section, which has six steps, is a barrier along its top border, consisting of low tiers, with narrow openings between them, separating it from the upward course of the causeway beyond. Another feature of this section was the gradual decrease of the depth of the tiers of steps or low seats as they ascended. The lowest was 80 centimetres, and the depth of the other five follows in decreasing order, 70, 63, 56, and 45. The top row may have been reserved for children. The mean height or tread of the steps is 18 centimetres; higher by about a third than the steps of the Eastern flight.

The Western section of these steps, which lies beyond the road opening, is not only broken off on the West side, but has been deliberately cut into by the oblique course of the descending paved footway, already mentioned as having joined the central pavement of the Royal Road farther West.

[1] Four courses of this are preserved in its North-West angle. On its West side this was faced by a lower ledge of masonry. On re-used blocks of its Southern face are cut two early signs, the double-axe and the 'branch'.

[2] See A. E., *Knossos*, *Report*, 1902, p. 110 seqq. and Figs. 67, 68.

Steps at N.E. Angle restored.
Bastion.
Main Entrance to Area.
Look-out Tower (since removed).
N.W. Angle of Palace.
Paved and Stepped Causeway Running S.
Paved Causeway Running E.
Gypsum Pier S. of West Entrance.
Upper Part of Supporting Wall restored.
Remains of Earlier Wall.
Paved Central Path.

FIG. 363. STEPPED 'THEATRAL AREA' FROM NORTH-WEST.

There is reason to believe that this section of the causeway, in its present form, is of late construction. The wall that crosses the continuation of the lines of steps on the Plan, Fig. 362, seems, itself, to represent an early line.

FIG. 364. SOUTHERN STEPS OF 'THEATRAL AREA' LOOKING EAST: SHOWING CENTRAL BASTION ('ROYAL BOX').

It seems best, therefore, to assume that the West section of this flight had originally consisted of six steps like that to the East, and had been built up level with it behind. In days of ruin, on the other hand, it was quite natural for the pathway to cut off this corner, following the slope of the hill more directly.

Enclosed by wall on West

It seems reasonable also to suppose that the central area, as well as the end of the Western flight of steps, was shut in by a line of wall. The

existing remains of walling on this Western side are unfortunately far from clear, and belong to more than one epoch, but the base of a gypsum pier on the South side of the entrance is well preserved (see Fig. 363). side of area.

The size of the enclosed paved area was approximately 13 metres from East to West by 10 from North to South—about 42 feet, that is, by $32\frac{1}{2}$. These dimensions are obviously incompatible with any large performance, such as the dance depicted on one of the Miniature Frescoes.[1] Neither would there have been room for such crowds of spectators as we see packed into the Grand Stands on the 'Temple Fresco'.[2] It is to these graphic illustrations indeed, that we should rather look for a record of the dancing-floor of Ariadne, in 'broad Knossos', of which the tradition has been preserved for us by Homer. Area not for large performances.

In the present case the number of spectators must have been more restricted, and would have been practically confined to the Palace lords and their dependants. Assuming that the low steps were intended for standing room rather than for sitting, there might, indeed, have been room for something over five hundred persons.[3] Room in 'Theatre' for about 500 spectators.

The arrangement itself is, in a true sense, 'theatral', though on very different lines from the Greek theatre. The 'orchestra' is here square, and the *θέατρον* proper faces only two sides of it. For a small performance before a limited number of spectators it was, however, quite well adapted, and on the occasion of the visit of Dr. Dörpfeld and his party during the 'Inselreise' of 1903 we organized here a dance of our Cretan workmen and their womenfolk—a dance, may be, as ancient as the building in which it took place. The sinuous meandering course of the dancers was in fact quite appropriate to the Knossian tradition. Cretan dance performed in area.

For minor shows, such as the boxing and wrestling bouts, that form such a favourite subject of Minoan reliefs, this central space, which could be easily sanded over, was well fitted. Yet we may believe that the most important function of the whole structure connected itself with ceremonial receptions. Religious processions from neighbouring sanctuaries, including perhaps an annual Advent of the Minoan Goddess from her *Casa Santa* on Juktas,[4] could be marshalled into the presence of the Priest-Kings, seated in the raised post of honour beneath a canopy of State. Foreign envoys Probably mainly a reception area.

[1] See Vol. iii.

[2] See Vol. iii.

[3] Allowing a space of a little over a foot and a half for each person the tiers of steps on the East would have provided standing room for about 360; those on the South (as completed) for 160, and to this perhaps a dozen may be added for the 'Royal Box'.

[4] Though that would more naturally enter from the South.

arrived from the neighbouring port, or by the 'Great South Road', from the haven on the Libyan Sea, could here be worthily received.

Chief entrance above—on Palace side.

It is specially deserving of note, however, that the opening in the centre of the Southern flight of steps was the main entrance to the enclosed area. As in the case of several houses on the borders of the Palace site, the

Fig. 365. Southern Section of 'Theatral Area' showing the Step-way running South, crossed by Paved Path running East.

principal access was from above.[1] The paved causeway that finds a passage into it is 3·75 metres broad, or over twice the width of the causeway running West. Its pavement descends by a gradual incline to the upper edge of the fourth step (see Fig. 365). Above, it points directly to the West Court and the Porch that opens on it beyond. It is immediately crossed by the diagonal line of paved path a metre and half wide, already mentioned as having formed a junction with the Royal Road below. In the other direction this branches into two routes, one proceeding directly to the Northern entrance,

[1] As, for instance, in the case of the North-East House, the 'Royal Villa', the South-East House, and in all probability the South House.

and serving at the same time the 'North-West Portico' and 'Initiatory Area', the other leading past the 'Northern Pillar Crypt' and pointing to the 'Royal Villa' beyond.

It will be seen that this Stepped Area forms in fact an integral part of the Later Palace system. There are strong indications, moreover, as will be shown in the succeeding Section, that it stood in the closest relation to a stepped entrance at the North-West corner of the Palace, bringing it into direct connexion with the principal upper halls on that side.

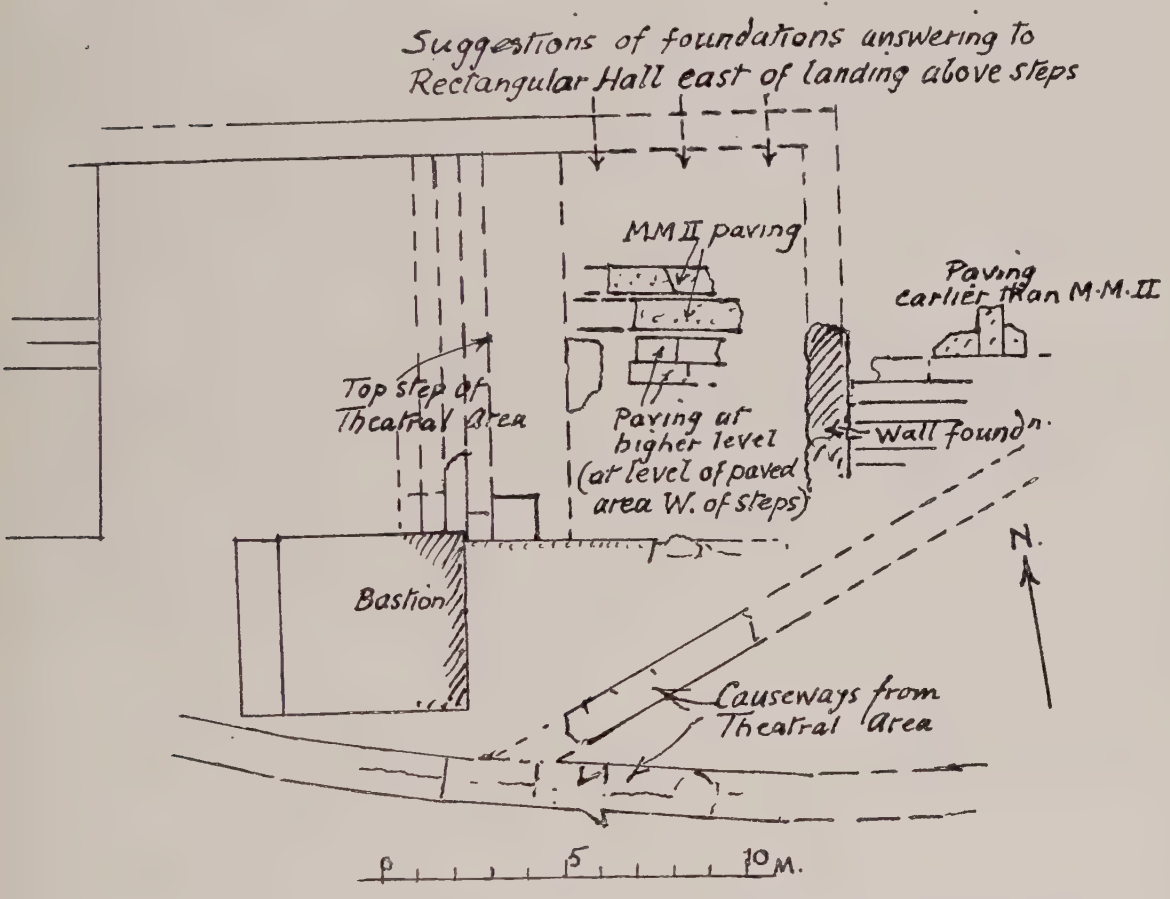


FIG. 366. PLAN OF AREA EAST OF THE EASTERN FLIGHT OF THE 'THEATRAL AREA' SHOWING FOUNDATIONS OF BACK WALL OF HALL AND PAVEMENTS AT THREE DIFFERENT LEVELS. (BY THEODORE FYFE.)

§ 58. North-West Corner Entrance to Palace, and Sanctuary Hall; Half-rosette and Triglyph Bands.

Paved way from 'Theatral Area' to N.W. Corner of Palace and West Court; Large arched block of gypsum—the 'Grand Piano'; Massive block of foundations at N.W. Angle; Lateral support of entrance steps at N.W. Corner; Need of entrance to Palace at this point; Remains of architectural reliefs; Frieze of triglyphs and half-rosettes—parallel finds at Mycenae, &c.; Frequent connexion with portals; Painted plaster frieze from M. M. III cist; Compared with 'Miniature Frescoes'—their M. M. III date now demonstrated; Resemblances of Knossian examples in minutest details to those of Mycenae; Chronological equations; Minoan border mouldings—similar at Mycenae; Stone dado slabs from same deposit—also stone lamp and basin; Architectural frescoes from Thirteenth Magazine—Columnar openings of Pillar Sanctuary; Illustrative paintings of buildings from Mycenae; Chequer-work an Egyptian feature; Mycenae paintings showing ladies looking out of window; Comparison from Old Paphos; Knossian examples—a Private Box; Fragments from Thirteenth Magazine probably illustrative of Sanctuary Hall above; Indications of its surviving sanctity; 'Palace Style' Amphoras with Double Axes; the 'Camp-stool Fresco'.

Paved Way from the 'Theatral Area' to Palace.

Paved way heading for N.W. Corner and West Court.

The broader section of paved way that abuts on the middle of the Southern flight of the 'Theatral Area' ascended the slope to the South of it, heading for a gap that existed between the North-Westernmost Palace Angle and the Treasure House to be described below. It had to pass through this avenue to reach the West Court and its ultimate destination beyond.

Beyond the diagonal path that crossed this road immediately on its leaving the South wing of the 'Theatral Area', the pavement shows signs of having stepped up, but the traces of the main paved way disappear shortly above this point owing to the great denudation of that part of the site. Of the two Palace angles, indeed, that here project on that side, there are visible only the small foundation blocks on which, in places, a few base slabs rest (see Fig. 367). One outstanding feature, however, on the otherwise bare slope is a large gypsum block of a remarkable shape resembling a half arch—familiarly known as the 'Grand Piano'—and well provided with

Large arched gypsum block.

dowel holes for woodwork (in foreground of Fig. 367). It lies close to the course of the ascending line of paved causeway, and it seems possible that it belonged to some arched entrance on an original border-line of the outer Court on that side.

The corner of the 'Treasure House' referred to, as finally enlarged,

Fig. 367. Gypsum Block, apparently of Arched Entrance, called 'The Grand Piano'. North-West 'Buttress' and Foundation of Palace Walls in Background.

approaches so near to the angle of the North-West Palace bay that only a passage of three and a half metres was left, exactly corresponding with the original width of the paved way where it entered the 'Theatral Area'.

Paved passage-way to West Court.

Massive Foundation Block or Buttress.

The pavement of the road, which has entirely disappeared at this point, must have here been partly overlaid on a solid rectangular block of foundations jutting forward from the line of the Palace wall. This was composed of large limestone blocks (Fig. 367), and was at first thought to indicate an original extension North of the façade of the Palace on this side. It doubtless incidentally fulfilled a very useful function of buttress

Massive foundation block at N.W. Palace Angle.

at a point where the rapid falling away of the ground was a source of weakness to this angle of the building.

Lateral support of steps leading to entrance at N.W. Corner.

But there are strong reasons for supposing that it had served a more direct object as a lateral support to a flight of steps leading from the paved way above described to the platform and porch of a small but very important entrance at the North-West Corner of the Palace (see Plan, Fig. 369). A line of gypsum blocks belonging to the balustrade of the landing has, in fact, been preserved.

Presumed Existence of Entrance at North-West Corner of Palace.

Need of entrance to Palace at this point.

The presumption in favour of the existence of some access to the building at this point is so strong that even were no direct evidence forthcoming it might well be looked on as reasonably certain. It will be shown below that for ceremonial purposes the great halls of the *piano nobile* on this side of the building were approached by a stately but circuitous route from the West Porch at the extreme Southern end of the adjoining Court and thence by the 'Corridor of the Procession', winding round part of the Southern terrace front and again with a turn North through a lower and upper Propylaeum. But it is hardly conceivable that the Palace lords and their retainers, who, for whatever reason, found themselves in one or other of the upper halls of this quarter, should have been obliged if they wanted to reach the theatral reception area, or any of the buildings and offices served by the road beyond, to make such a long detour, or be forced to take the winding alternative route that led out North past the 'Initiatory Area'.

Architectural Relief Band from Entrance Area.

Deposit with remains of architectural reliefs.

The projecting section of the West Palace façade, which was left in position, when, as shown below, the façade line immediately South of it was thrown back some four metres, itself offers a very convenient landing place for a stepped approach at its Northern end. Here, beneath the platform that would have been so reached, between the façade wall and the end of the Fifteenth Magazine, and also largely within the West end of the Fourteenth, were found remains of a decorative band and of other architectural fragments wrought in a fine-grained greenish-grey limestone.

Half-rosette and Triglyph Bands.

The most remarkable of these was the remains of a band of elongated half-rosettes divided by a kind of 'triglyph', the borders of which were formed by upright bars, of the kind so well known in Minoan and Mycenaean art (Fig. 368). The radiating petals of the half-rosettes closely

resembled the sculptured rosettes found elsewhere. The bars of the 'triglyphs' in this case show a running spiral decoration, which is a recurring feature on such panels.

Frieze of triglyphs and half-rosettes.

The fan-shaped half-rosettes clearly stand in a very close relation to the single rosettes seen on the parallel class of friezes, of which fine remains occurred by the South Propylaeum, belonging, as is shown below, to its earlier stage, dating from the beginning of M. M. III. Fragments of both

Fig. 368. Limestone Frieze with Half-rosettes and 'Triglyphs' from N.W. Angle of Palace.

kinds of decorative reliefs, finely executed, have been described above, as having been found together in the area of the presumed South-West Porch, in a M. M. III association.[1] The portal with which these latter were undoubtedly connected had no doubt undergone restoration not long after the great catastrophe at the close of the Second Middle Minoan Period, and it is to this date that these remains must be referred. At Mycenae, too, a similar half-rosette band had formed part of the decoration above the doorway and relieving triangle of the 'Treasury of Atreus',[2] and a fragment of another, showing barred 'tongues' identical with those of the Knossian examples, was found by the Propylon of the Palace.[3]

Compared with parallel finds of M. M. III date.

[1] See above, pp. 163, 164, and Fig. 83. The remains of the half-rosettes were fragmentary, but part of one with a small section of the overlapping 'tongue' is shown in Fig. 83, *f*.

[2] Perrot et Chipiez, *Hist. de l'Art*, vi, Pl. IV.

[3] *B. S. A.*, xxv, p. 236, Fig. 47 *a* and p. 237. It was of grey limestone, with good undercutting, and clearly contemporary with the relief band from Knossos (Fig. 368). Another fragment of a similar band, much abraded, from the Hellenistic Gymnasium at Mycenae (*B. S. A.*, xxv, p. 236, Fig. 47), conforms to the example from Knossos both in the ribbed 'tongues' and the spiral decoration of the 'triglyph' The barred 'tongues' also appear, in a slightly decadent form, on a small ivory frieze from Mycenae, Ἐφ. Ἀρχ., 1888, Pl. 8, Fig. 11; Perrot et Chipiez, vi, p. 347, Fig. 226.

Relief bands connected with portals.

The repeated occurrence of relief bands of this class in connexion with monumental portals has a special significance in its bearing on the present find. The small basement area into which these architectural fragments had fallen may be taken to mark the position of the doorway that had been the goal of the flight of steps assumed above to have existed by the North-West Corner of the building (see Fig. 369). As noted above, the balustrade of the landing of these is marked by the remains of a line of gypsum blocks, the Western face of which has been partly preserved. It rests on the massive foundations already described. The interspace between the landing thus reached and the portal beyond would have been filled by a small porch with a columnar balustrade on its West side. The doorway itself, as in the case of the lower porch at Phaestos,[1] probably opened on a corridor immediately turning to the left. This passage, which seems to have exactly corresponded with the Thirteenth Magazine, would have brought the entrance into close connexion with the Northern section of the Upper Long Corridor—forming a long light-area,—and in this way with the principal halls of the West section of the building that lay on either side of the Corridor. The arrangement of the whole entrance system as reconstructed will be seen in the Plan, Fig. 369.[2]

Wedge-shaped incision for suspension of relief band.

A wedge-shaped incision is seen in the back of the stone presenting the half-rosette band, which was, as Mr. Fyfe notes, 'a real dove-tailed joggle, which evidently recurred at regular intervals and enabled the heavy stone pieces to be hung securely on hard wood or bronze clamps built into the solid wall'.[3] It is clear that we have here, therefore, to do with a frieze at some distance from the ground rather than with a dado band low down. From the fact, moreover, that we have evidence here of at least five 'triglyphs', it must have belonged to a structure of a different class from that represented by the little Shrine of the 'Miniature Fresco' illustrated below, where the half-rosette band appears beneath the coping of the central opening.

Triglyph and half-rosette bands.

In Minoan and Mycenaean structures, indeed, we see this triglyph and half-rosette band variously applied. In the little Shrine of the 'Miniature Fresco' it is set beneath the central coping. On the painted stucco fragment, Fig. 377 below, found in the adjoining area, beneath a cist of the Thirteenth Magazine, all we can tell is that it lay immediately beneath a similar ledge supporting sacral horns. On another, from Orchomenos,[4]

[1] See *P. of M.*, i, p. 214, Fig. 160.

[2] See, too, the Block Plan of the West Section of Palace at the end of this volume.

[3] See Mr. Fyfe's note at end of Section and Suppl. Pl. XXII.

[4] Bulle, *Orchomenos*, Pl. XXVIII. In the case of a fragment of wall-painting from the Later Palace at Tiryns (Rodenwaldt, *Tiryns*, ii, p. 137, Fig. 58) the half-rosette is seen on

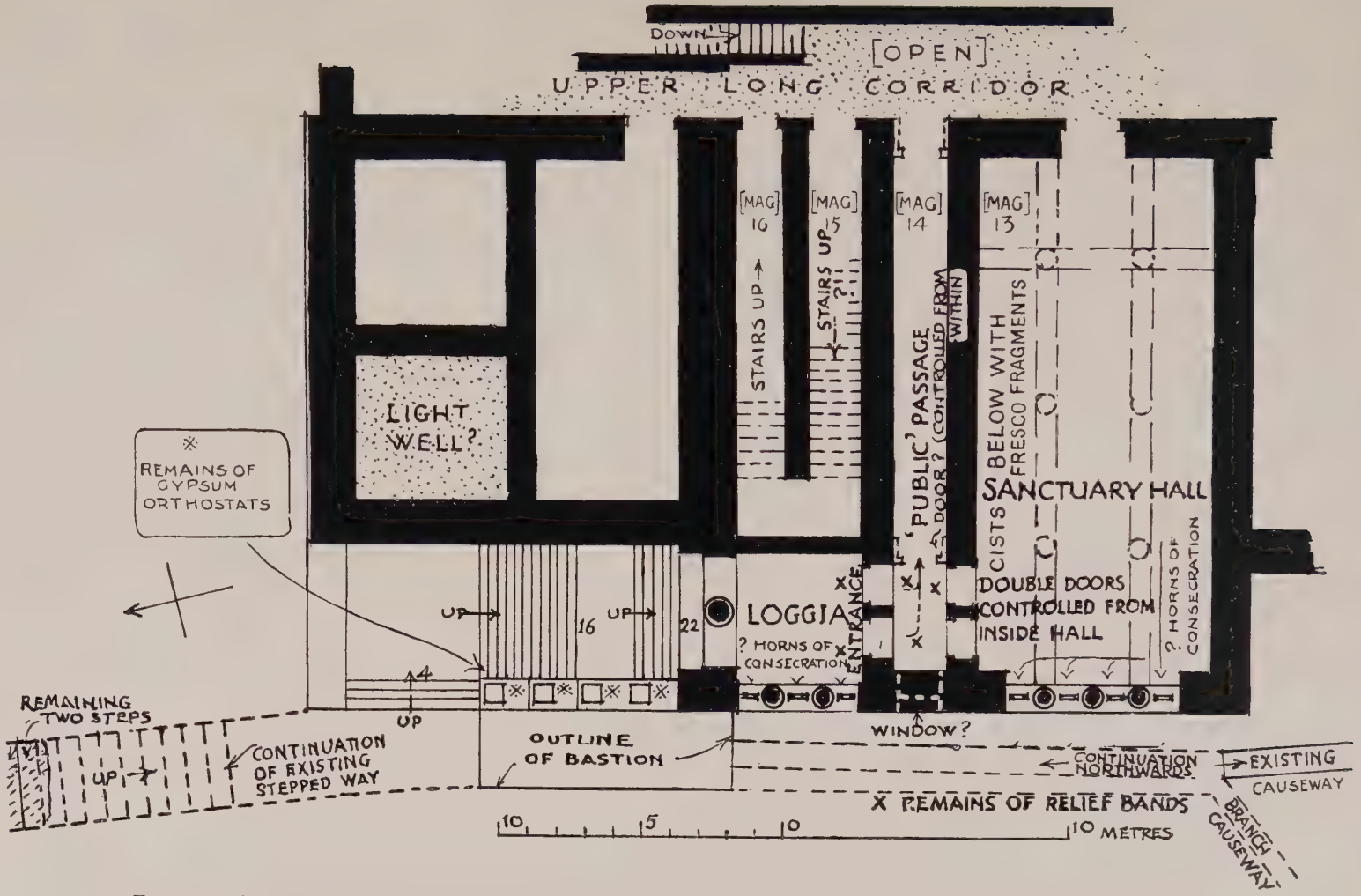


Fig. 369. Plan showing Proposed Restoration of North-West Corner System of Palace (see pp. 590–2).
By Theodore Fyfe, F.R.I.B.A.

it occurs above two cross-beams with painted disks between them, which seems to indicate that it was somewhat higher up. In the Men's Megaron at Tiryns it seems to have performed the function of a kind of wainscoting at the base of the walls. A further instance of a similar arrangement has

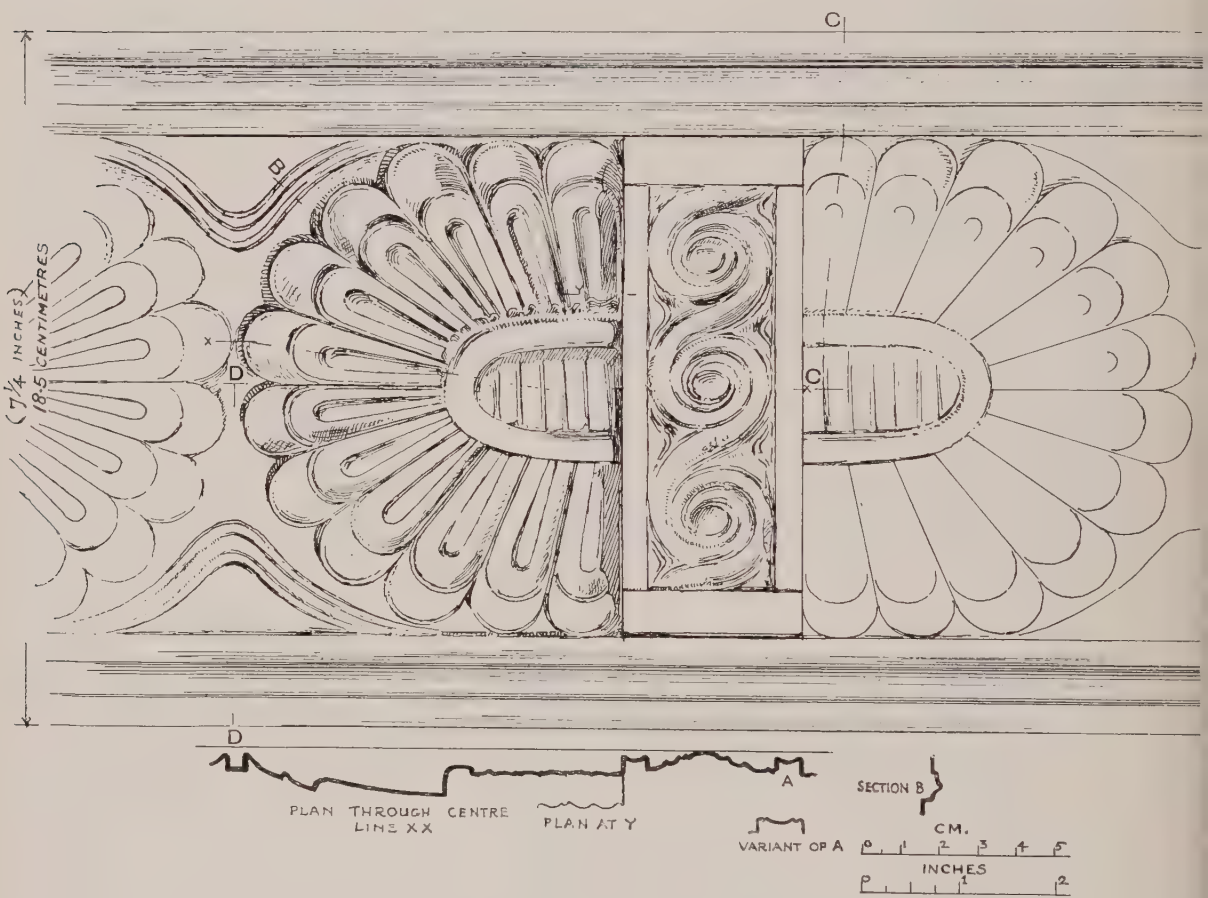


FIG. 370. PLAN AND SECTION OF PART OF TRIGLYPH AND HALF-ROSETTE BAND. BY THEODORE FYFE. (SEE ALSO HIS SECTION IN SUPPL. PL. XXII.)

now, moreover, been supplied by the discovery of a fragment of a painted band of this kind at the base of the walls forming the North-East corner of the Megaron porch at Mycenae.[1]

Of the connexion of this architectural device with an original wooden framework, the façade of the little Shrine of the 'Miniature Fresco', here reproduced (Fig. 371), supplies the best illustration.[2]

the side of a broad post, of indeterminate extension upwards.

[1] A. J. B. Wace in *Report of the British School Excavations at Mycenae* (*B. S. A.*, XXV), pp. 234, 235, and Fig. 46.

[2] See too Coloured Plate, in Vol. iii.

Triglyph bands: Classical analogies.

On this, the brown colour of the upright bars between the half-rosettes shows that they were part of a wooden casing that secured the edges of the decorative side panels. In the alabaster frieze from Tiryns—itself probably of Knossian origin—which in its inlays of *kyanos* or glass paste illustrates a later decorative evolution,[1] the central portion is in fact in a separate piece, the borders of which overlap the plaques presenting the half-rosettes.[2] This method of construction and the triple division of its central member, which thus appears to have been originally of woodwork, afford a very close analogy with the Classical Greek triglyph—it too, as the survival of its pegs (the *guttae*) shows, originally of wood—in its relation to the metopes. The latter, in fact, as is still visible in the case of the Parthenon, were originally separate slabs mortised into rectangular grooves cut in the sides of the triglyph blocks.[3]

That such an artificial decorative device should already have become an organic entity, translated wholly into stonework, by the days of the Middle Palace at Knossos, is itself a remarkable phenomenon. Parallel with it, moreover, is the contemporary evidence of the bands of simple rosettes which supplied the starting-point of the more elaborate design. The latter, highly specialized architectural type must thus have had a very ancient history on Cretan soil. From the first it appears as a fully assimilated adjunct of indigenous wooden construction, and reasons are given below for believing that this decorative arrangement was in its origin connected with the Minoan type of incurved altar-base.[4] It thus seems from the first to have had a religious association.

Close parallels with Mycenae.

It is of great interest to note, moreover, that the particular form in which these architectonic reliefs make their appearance at Knossos—already before the close of the Middle Minoan Age—corresponds with that in which they are found in the earliest architectural remains of Mycenae. In that case we see decorative reliefs, many of them apparently executed in the same Cretan stone, presenting not only a similar pattern, but minute details of an

[1] Cf. Dörpfeld, *Die kretischen &c. Paläste* (*Ath. Mitth.*, 1905, p. 288).

[2] Dörpfeld, in Schliemann's *Tiryns*, p. 284 seqq. and Pl. IV. The ends of the half-rosettes were in this case bordered by a design of the 'argonaut' class. The horizontal bars were decorated with rosette reliefs. A sculptured bar, however, 'of a light green very hard stone' found in the East Wall of the 'Men's Megaron' (*op. cit.*, Pl. IV) shows a running spiral decoration like that of the Knossian examples. A glass paste ornament from Menidi (Dörpfeld, *loc. cit.*) has half-rosettes divided by a bar with running spirals.

[3] This construction is well illustrated by F. C. Penrose, *Principles of Athenian Architecture*, Pl. 17.

[4] See Suppl. Note, p. 607, and Figs. 380, 381.

identical kind. Thus, as noted above, we find the same curious cross-ridged ornamentation of the tongue-like centre, while the middle bar presents the same triple succession of linked spirals as the Knossian frieze.[1] Such similarity in minutiae of detail, and, it may be added, in the character of the limestone used, clearly shows that in the case of these sculptured friezes Mycenae was directly indebted to the palatial models of Knossos. The practical identity that is at times discernible in the material suggests, indeed, that in some cases at least these reliefs were actually exported from the Knossian workshops, as the alabaster frieze of Tiryns seems to have been at a later date. These conclusions, which can hardly be disputed, have also an important chronological bearing, since there is definite evidence that at Knossos the architectonic friezes with this motive and the allied rosettes[2] go back to the earlier phase of the Third Middle Minoan Period.

Chronological equations.

Minoan Border Mouldings.

Minoan border mouldings.

Alike at Knossos and at Mycenae the half-rosette frieze was framed, as shown in the section, Suppl. Pl. XXII,[3] with delicate and beautiful mouldings consisting of a slight central convexity in relief, sharply bordered by narrower bands showing similar soft curves in cavetto. This moulding, which forms a prominent feature in Minoan architectural ornament, also accompanies the parallel reliefs of whole rosettes. It has been already illustrated in relation to those from the area of the North-West Porch,[4] and the magnificent rosette frieze to be described below, remains of which were found in connexion with the earlier Propylaeum,[5] presents similar borders.

Partial parallel with Selinus.

The delicate curvature of the central band of this class of border recurs in the crowning moulding of the epistyle in Temple C at Selinus,[6] but

[1] This spiral decoration has a long history in connexion with such friezes. They are seen on a glass plaque from the beehive tomb of Menidi (Lolling, *Das Kuppelgrab, &c.*, Pl. III, Fig. 24). Cf. Perrot et Chipiez, vi, p. 548, Fig. 282.

[2] For the rosette friezes and further comparisons with Mycenae, see below, p. 695 seqq.

[3] Cf., too, p. 166, Fig. 84, *c*, above, and Fyfe, *Painted Plaster Decoration at Knossos*, *Journ. R.I.B.A.*, x, p. 117, Fig. 32.

[4] See above, p. 166, Fig. 84, *c*, and compare p. 163, Fig. 83, *a*, *d*, *e*.

[5] See below, p. 694, Fig. 436, and section, Fig. 437.

[6] See Theodore Fyfe's note at end of Section, and *Painted Plaster Decoration at Knossos*, p. 119, note. Cf. Koldewey und Puchstein, p. 103; Durm, *Constructive und polychrome Details der griechischen Baukunst*, 1880, Pl. ii; Perrot et Chipiez, vi, p. 709, Fig. 308.

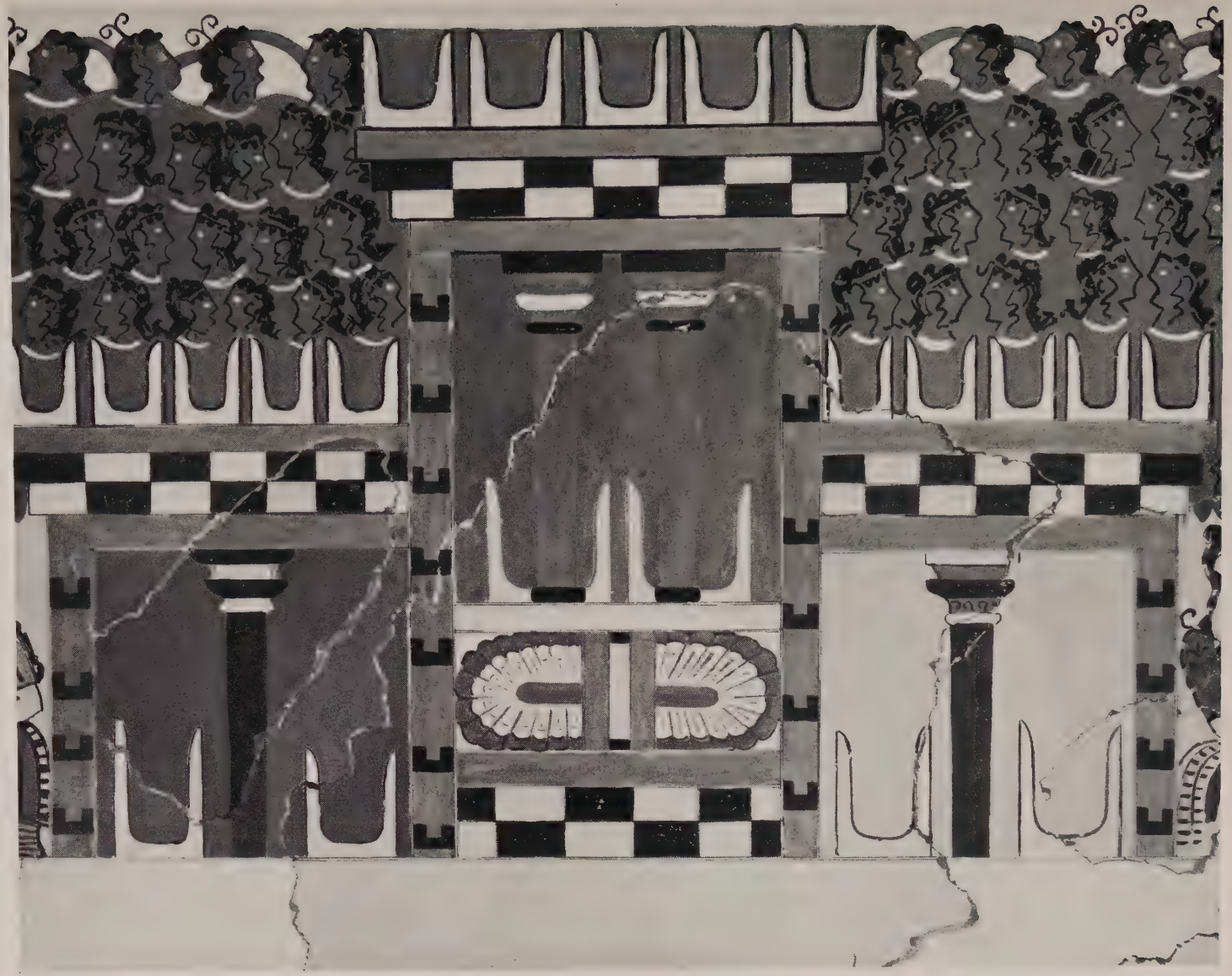


Fig. 371. Pillar Shrine of 'Miniature Fresco', restored: showing Triglyph and Half-rosettes beneath Coping of Central Cell.

the bands above and below have flat surfaces, more in keeping with the severe Doric spirit, in place of the harmoniously responsive cavetto of the Minoan examples.

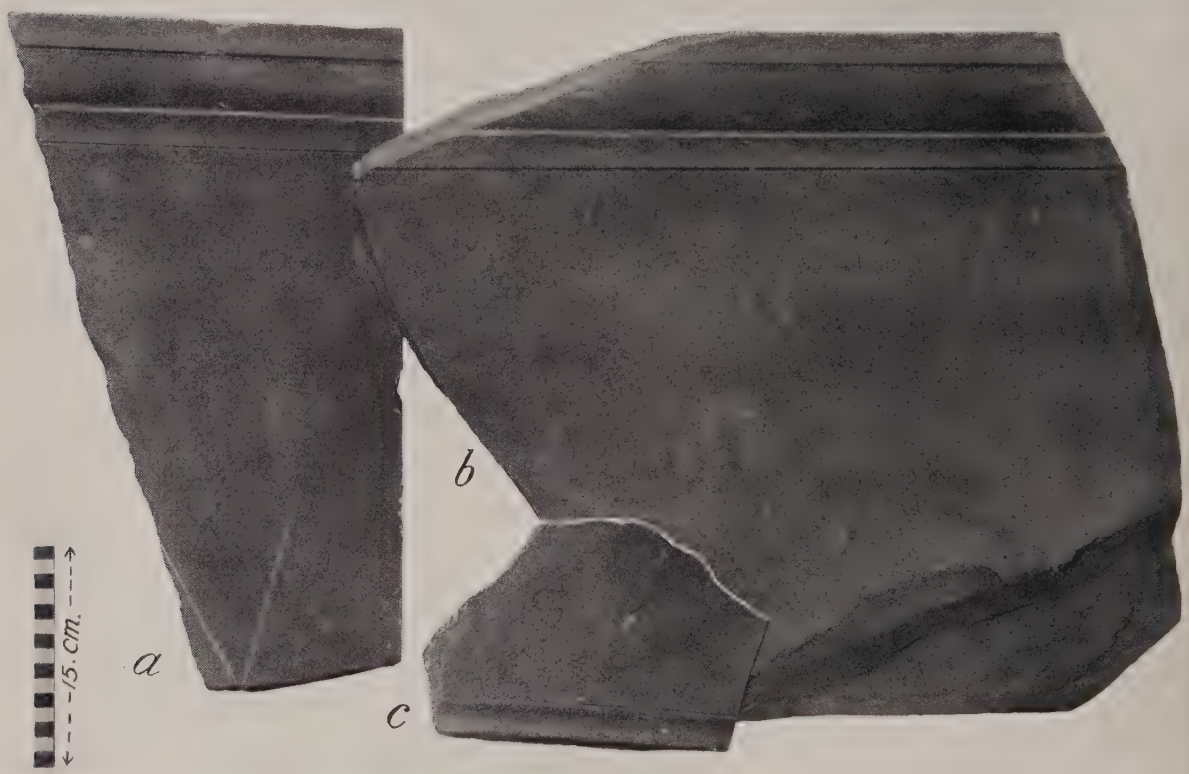


Fig. 372. Fragments, probably of Dado Slabs, of Close-grained Greenish Stone.

Remains of Stone Dado.

In the basement spaces beneath the presumed North-West Corner Entrance, where the remains of the rosette and triglyph band were found, there came to light some large fragments consisting of a close-grained greenish-grey stone showing a border of the same kind as the other. (See Mr. Fyfe's drawings, Suppl. Pl. XXII.) Of the specimens given in Fig. 372 the largest piece, *b*, has a moulding 9 cm. broad, while that of another, *a*, is about 8 cm. The smallest of the fragments shown has a simple groove, probably along its lower margin. The slabs, though broken off below, were of a height approaching half a metre, and might have formed parts of a dado, a pavement slab fitting into the groove of *c*. Such refinement of execu-

tion, combined with the very solid material, contrasts indeed with the ordinary dado slabs of gypsum and must in any case be regarded as of early date.

Indications of Sanctuary Hall.

Stone lamp and basin from same deposit.

In the same deposit, with the remains of the stone frieze and the other architectural fragments, occurred the columnar pedestal of a lamp, executed in a kind of purple gypsum, with a winding spiraliform ornament like that of the 'triglyphs' of the frieze. With this there also came to light a large stone basin of the same material, resembling that found behind the 'Room of the Throne' described in a subsequent Section. It may have served some lustral or 'baptismal' function connected with a small sanctuary that seems to have stood in the neighbouring area.

Architectural frescoes from cists of Thirteenth Magazine.

Columnar openings of pillar sanctuary.

Attention has already been called in the previous Volume to the discovery, beneath the floors of a series of cists in the Thirteenth Magazine, and in a pure M. M. III medium, of remains of frescoes, some of them depicting parts of what was clearly a pillar sanctuary with Double Axes stuck into the capitals and columns and sacral horns on the coping between them. With these were other fragments of painted stucco relating to the bull-grappling sports held in honour of the Goddess, and parts of crowds of spectators, identical, though on a slightly larger scale, with those of the 'Miniature Frescoes'. Although these wall-paintings, from the scale on which they were executed, would themselves have been appropriate to some moderate-sized compartment, the architectural structures to which they refer were quite different from the typical Minoan shrines, which are clearly shown to have been of quite small dimensions. They were, rather, large halls with columnar openings on a Court.

Illustrative paintings of buildings from Mycenae.

Remarkable illustrations of buildings reproducing the same features have now been supplied by the remains of frescoes discovered by Dr. Rodenwaldt[1] in the Megaron at Mycenae and by those due to the supplementary researches of the British School at Athens under the direction of Mr. Wace.[2] The comparative views given in Fig. 373, *c*, *d*, of the buildings depicted on the Mycenae frescoes, and the structural features shown on the fragments from beneath the cists of the Thirteenth Magazine, will sufficiently demonstrate that they belong to architectural façades of a similar kind.[3]

[1] *Fries d. Megarons von Mykenai*, p. 23 seqq.; *Palast und Kampfszene* and *Beilage*, ii. The first discovery of fresco fragments, here a good deal burnt, was made by Tsountas (Πρακτικά, 1886, and Ἐφ. Ἀρχ. 1887), Pl. II.

[2] *B. S. A.*, 1925, p. 247 seqq. and Plates XLII, XLIII (described by Miss W. Lamb).

[3] In a somewhat later and cruder form we also recognize structural and decorative forms taken from the same cycle in some of the painted plaster fragments from Orchomenos. H. Bulle, *Orchomenos*, Pl. XXVIII.

The correspondences extend to such details as the chequer-work decoration, the wide columnar openings, and the accentuated upward widening of the shafts of the columns—which seems to have been a special M. M. III characteristic. It will be seen, moreover, that the little Shrine of the 'Miniature Fresco' (Fig. 371, above) stands in an inseparable connexion with the same group.

'Chequer' work of Egyptian origin.

One special feature, the 'chequer' work which recurs in each of these groups, and, again, on the Miniature Terra-cotta Shrine of earlier date, is of exceptional interest, since it is unquestionably taken over from a decorative detail that is of constant recurrence in Egyptian façades from the days of the Old Kingdom onwards. It has no real connexion—as might at first sight be supposed—with masonry or brickwork, but is of purely textile origin, and was taken over from ornamental hangings rather than from any structural element. It must at the same time be observed that in all other respects the type of construction shown in these Minoan façades is altogether different from the Egyptian. It will be seen that the fronts of buildings with their window openings, their rows of disks, answering in their original intention to the rounded ends of beams, and their higher central section, bear a general resemblance to some of the façades of the faïence 'house tablets' described in the preceding Volume.

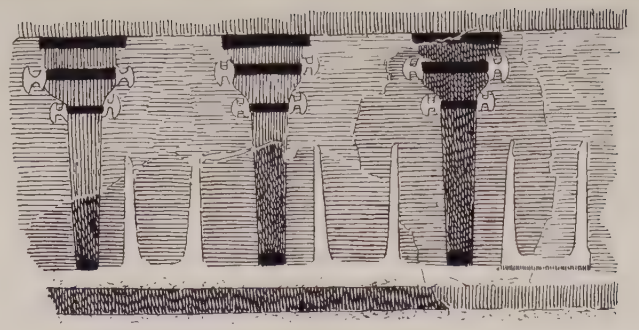
M.M. III architectural features.

The detailed correspondence of the buildings of the Mycenae group with the structural forms preserved for us on the painted stucco fragments from the Thirteenth Magazine is itself of considerable chronological value. The remains there found beneath the more superficial cists are clearly delimited as belonging to the Palace as it existed before the great Earthquake that took place towards the close of M. M. III.

Of their comparatively early date, moreover, there can be no question, since according to the regular archaeological rule, while fragile objects like faïence and pottery are in such cases safely referred to the last epoch of a deposit, fragments of fresco paintings derived from the walls often go back to a distinctly earlier date, in this case probably to the earlier phase—M. M. III *a*—of the Middle Palace. It looks as if the date of the early Palace at Mycenae, to which the closely related façades belonged, could not have been long posterior to this.

Mycenae paintings showing ladies looking out.

In one respect, indeed, the fresco remains found in the Megaron at Mycenae differ from those of the cists: in that case there are no signs of sacral horns on the roof lines or beside the shafts, nor of double-axe blades stuck into the columns. This religious element is, however, supplied



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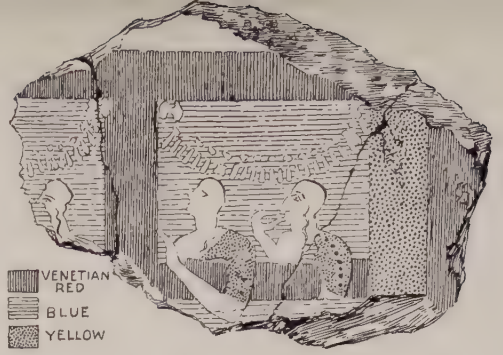

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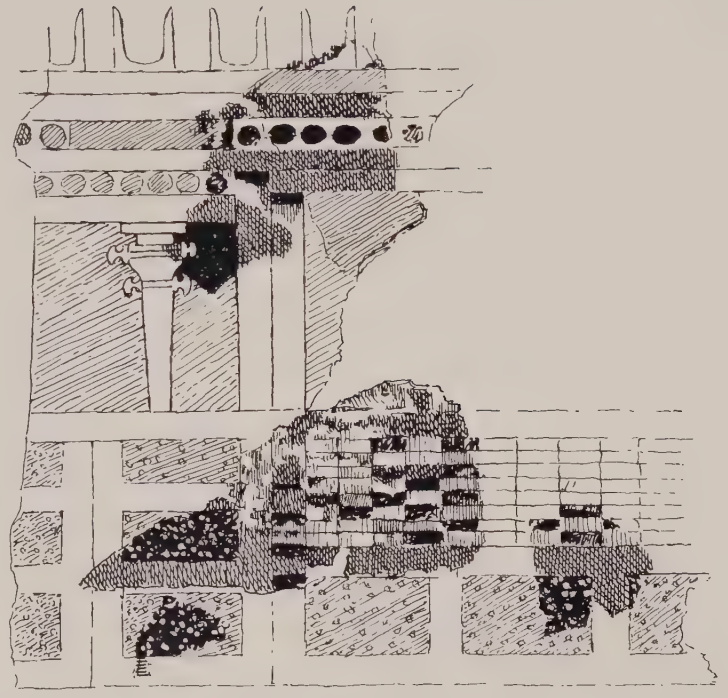

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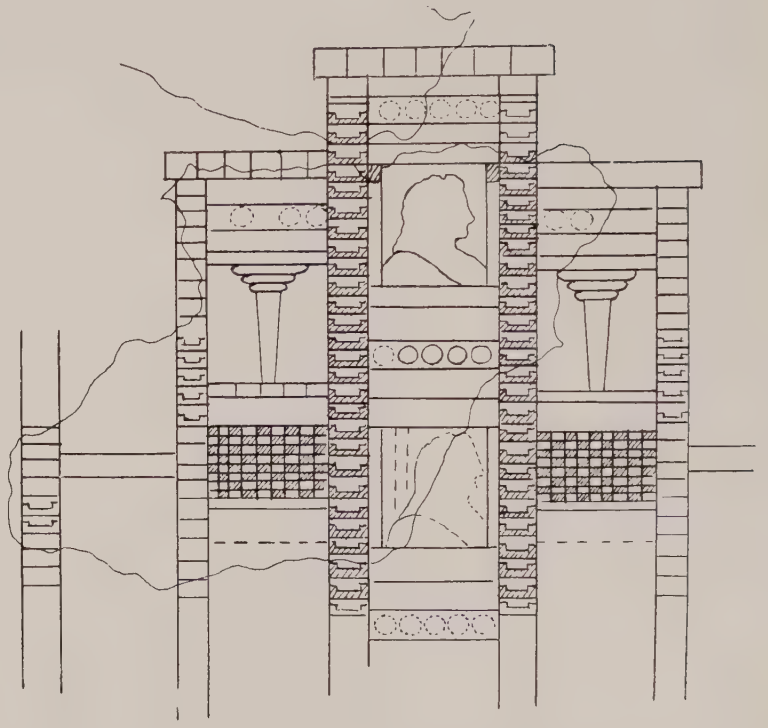


d

FIG. 373. COLUMNAR FAÇADES FROM FRESCOES: *a*, *b*, KNOSSOS, UNDER M. M. III *b* CIST OF XIIITH MAGAZINE; *c*, MYCENAE, FROM NEAR GRAVE CIRCLE; *d*, MYCENAE, MEGARON OF PALACE.

by the fragment already illustrated,[1] found by Schliemann in the area of the Grave Circle, showing fat ladies lolling over a window opening, in the upper part of the posts of which are inserted Double Axes, which in this case serve to attach the ends of festoons of beads and pendants (reproduced in Fig. 373, *c*). An epitome of such a scene, though without the religious adjunct, may

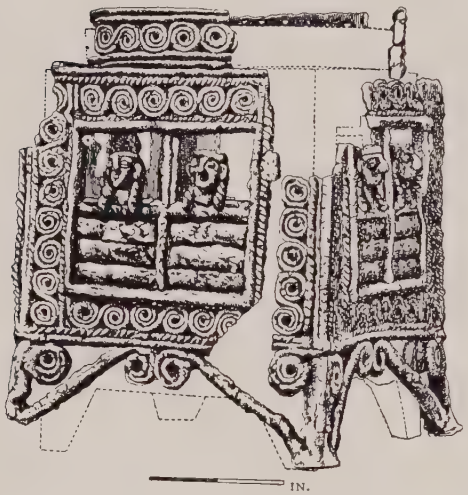


Fig. 374. Bronze Stand from Old Paphos showing Women looking out of Window.

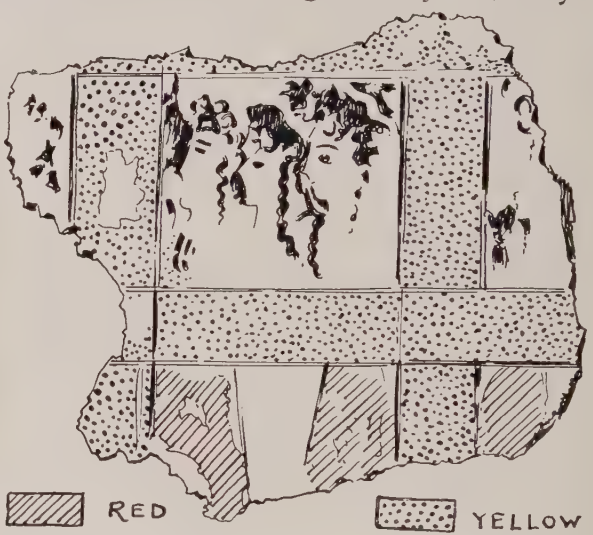


Fig. 375. Standing Figures of Ladies looking out of Casements, Knossos.

Women looking out of windows: Biblical analogies.

be found in the single female faces seen at the windows of the building depicted in Fig. 373, *d*.

In the 'Miniature Frescoes' we see an intermixing of unveiled women with men in the crowd before the stands and shrine that runs quite counter to Oriental notions. It is clear, however, that the Minoan artists regarded windows and balconies as the most appropriate places for women to make their appearance, in this recalling the Biblical descriptions of Michal, Saul's daughter, of the mother of Sisera, and, notably, of Jezebel, who 'painted her face, and tired her head, and looked out at a window'.[2]

Comparison from Old Paphos.

An interesting illustration of this is supplied by the bronze stand of L. M. III date found in a tomb at Old Paphos (Fig. 374).[3] An instructive parallel to the windowed stand here seen is supplied by the terra-cotta

[1] See above, p. 410, Fig. 236, and Vol. i, pp. 444, 445, and Fig. 320. See, too, G. Rodenwaldt, *Ath. Mitth.*, xxxvi, 1911, p. 222 seqq. and his Coloured Plate (IX).

[2] 2 Kings ix. 30.

[3] *B.M. Excavations in Cyprus*, p. 10, Fig. 18. Dr. A. S. Murray quotes in relation to this object the Biblical passages (2 Samuel vi. 16, Judges v. 28, and the above), and the Nimroud panels with the head of a woman looking out of a window.

example from Gournià given above,[1] in which the stand takes the form of a round tower with windows showing 'mid-wall shafts'.

An isolated piece, Fig. 375, found to the North of the Palace site where the great waste heaps of fresco came to light, presents a certain parallelism with the Mycenae fragment, Fig. 373, *c*. Here three ladies showing elaborate coiffures are seen looking out of a central opening, framed by wooden bars. The scene is continued in the adjoining compartment on either side. All the figures, however, in this case are clearly standing. Knossian parallels.

Fig. 376. Lady looking out over Balcony of Chamber, Knossos.

A different version of a similar scene is shown in Fig. 376 from the area of the Miniature Frescoes, restored in a convincing manner by Monsieur E. Gilliéron, fils, from two fragments. Here a lady stands on the balcony of a structure, on the left side of which is a fragment with a deep Venetian red ground evidently belonging to a crowd of men on a lower level. In front of the lady here is a low wooden railing, and behind her a narrow horizontal opening, the casing of which was filled with network. We seem here to have a small raised platform or *loggia* so devised with the netting behind that, while privacy was secured, a free passage was left for air. Lady on balcony.

The columnar openings seen in the case of the façades on the stucco fragments of the Thirteenth Magazine, with the Double Axes stuck into the capitals, and the Double Axes on the coping between the columns, not only present the appearance of having been derived from some shrine above, but reproduce a type of religious building on a larger scale. They may well, indeed, supply an actual record of the façade of a sanctuary hall occupying a large part of the projecting North-West Bay of the Palace, as it existed before the great Earthquake. On the other hand, the architectural fragments

[1] P. 134 and p. 139, Fig. 70 *bis*. This stand is of L. M. II date.

Fragments from Thirteenth

described above found in the same area, seem to show that, in part at least, decorative elements inherited from the earlier building had survived to form an integral part of the restored fabric.

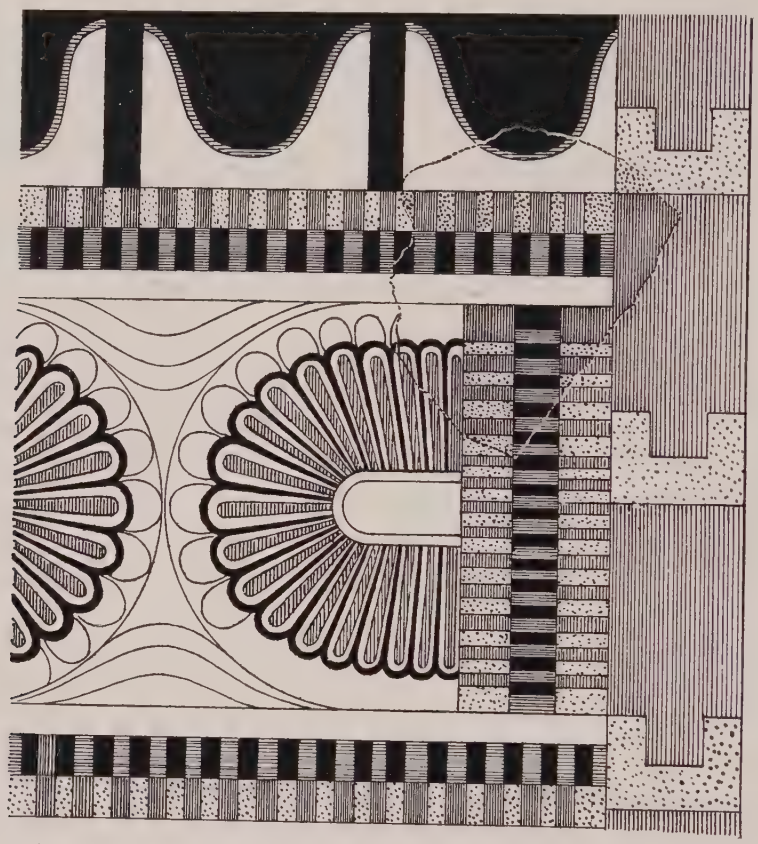


Fig. 377. Restoration of Painted Plaster Fragment from below Later Cist in Thirteenth Magazine (M. M. III).

Magazine probably illustrative of Sanctuary Hall above.

Together with the other painted stucco fragments below the upper cists there occurred the remains of half-rosette and triglyph bands, pointing to the existence of this architectural feature in this area in the days of the earlier M. M. III Palace. A restored section of one of these[1] is given in Fig. 377, and in this case the sacral horns above the coping indicate that it formed part of a religious building. Here the wooden border with its upright sections mortised into the ends of cross-beams will be seen to be identical with that of the shrine on the 'Miniature Fresco', Fig. 371, above.

Indications of surviving sanctity.

That the sanctity attaching to this upper hall survived to the last days of the Palace is shown by a series of later relics found in this area. Both

[1] Cf. Fyfe, *Painted Plaster Decoration at Knossos* (*Journ. R.I.B.A.* x, Pl. ii, Fig. 5).

inside the wall-line of the Southern section of this bay of the Palace and fallen above the adjoining pavement of the West Court occurred abundant remains of large amphoras in the finest 'Palace style' (L. M. II), on many of which Double Axes, rising from the sacral horns, formed a prominent feature in the decoration. Within this area were also found the fragments of the 'Camp-stool Fresco' with its seated votaries, the style of which also points to the last age of the building.[1] A part of a seated female figure belonging to these, wearing a sacral knot, has already received illustration.[2]

'Palace style' amphoras with Double Axes.

The 'Camp-stool Fresco'.

Note on the Triglyph and Half-rosette Band. By Theodore Fyfe, F.R.I.B.A.

The triglyph band, Fig. 370, offers peculiarly favourable indications both of the method of fixing and the position on the wall. At the back is a real dovetailed joggle (Suppl. Pl. XXII), which evidently occurred at regular intervals and enabled the heavy stone pieces to be hung securely on hard wood or bronze clamps built into the solid wall, whether this was wood or stone. It has also a moulded return edge, $2\frac{1}{2}$ inches in width, and a clean saw-cut behind this, forming a large rebate. From the nature of the joggle it is clear that this moulded edge was a *bottom*, not a top one; therefore the band must have been hung fairly high up, projecting $2\frac{1}{2}$ inches from the ordinary wall face above eye level, so that the return as well as the face could be seen. These facts are all the more conclusive as the top edge is plain and unbroken. The triglyph motive does not lend itself to anything but a continuous horizontal band, and there is no precedent at Mycenae or elsewhere for its use with a right-angled bend, as in a door architrave.

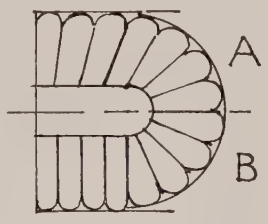


Fig. 378.

The prevailing moulding, seen both here and in connexion with the rosette bands and the dado slabs, is formed by two concave mouldings used on each side of a broader convex one. It is interesting to compare this moulding with the taenia of one of the temples at Selinus.[3]

The dimensions of the triglyph band are as follows:

Height, 18·5 centimetres (nearly) or $7\frac{1}{4}$ inches.

Full thickness, 10·25 centimetres or 4 inches.

Visible thickness, 6·4 centimetres or $2\frac{1}{2}$ inches.

Height of centre portion (excluding top and bottom bands) 13·25 centimetres or $5\frac{1}{4}$ inches.

Width of vertical members, 4·75 centimetres or $1\frac{7}{8}$ inches.

Width between vertical members, 20·5 centimetres or 8 inches (full).

The origin of this very widely used form of decorative band, which has been described as the 'triglyph', is obscure. It is a peculiarly Minoan and quite unique form. Analysed, it resembles two elongated half-rosettes separated by a vertical member which was sometimes carved with spirals.

That the ends of these bands consisted of half-rosettes only (i. e. like the form shown on Fig. 378) is clear from a fragment of end that was found. It seems, therefore, that it

[1] To be described in *P. of M.*, Vol. iii.

[2] *P. of M.*, i, p. 433, Fig. 311.

[3] See above, p. 596, note 6.

was the feature shown hatched, and not the longer one shown dotted, which was the germ of the idea, and as the vertical members were undoubtedly based on a constructive wooden origin, this is consistent with structural fact. The limit of division is XX and not YY (see Fig. 379).

The term 'elongated half-rosette' may seem clumsy, but it is reasonably exact. The form might have been devised like Fig. 378, B, but it is actually executed like A.

The 'eyes' of these pseudo-half-rosettes have the bead moulding surrounding them, which is characteristic of the rosette eye: the vertical decoration of the remainder is of a form which would be obvious in paint, and may have been borrowed from that technique.

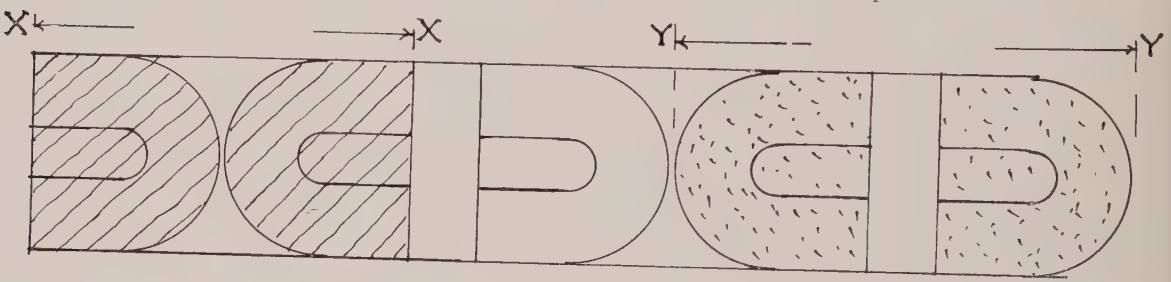


FIG. 379. DIAGRAMMATIC FIGURE OF BAND SHOWING TRIGLYPHS AND ELONGATED HALF-ROSETTES.

Lastly, the term 'triglyph' may require some explanation. Bell, following Dürm, questions a justification for the term. It is true that there are no glyphs, but that again is merely a question of acceptance by the Greek of a different decorative use for a similar structural feature. There is abundant evidence from frescoes that the vertical members of the Minoan triglyph band were of wooden origin as constructive members, just as there is the same evidence for the Greek triglyph. I think, therefore, that the term can be accepted on this broad basis as conveniently having a real justification from the constructive standpoint.

From the decoration of a stone seat front at Phaestos, it can be seen that there was a stone parallel, as well as a wooden one, to the triglyph and metope of the Greek frieze. The projecting panels are decorated vertically, and the recessed ones horizontally.

It is clear that the slabs and bands were cut out with bronze saws and then finely dressed on their exposed surfaces. Their material is of two separate and distinct kinds: (*a*)—as in the rosette, the spiral, and the slab fragments,—a light greyish purple with a distinct granular texture, taking a perfect rubbed surface but not a polished one. The sharpness of the carving proves the hardness and great durability of this stone. Without a chemical test it is difficult to say whether this is a sandstone or a limestone. It resembles Forest of Dean as much as any other building stone, being slightly more open in texture than Craigleith, but it is probably as hard as the best Yorkshire stone; (*b*) a bluish-grey, dense, slaty stone, as in the triglyph band fragments. This stone has much in common with the purplish 'porphyry' stones of the triglyph bands at Mycenae. Though closer in texture than (*a*) it was probably not so suitable for sharply defined carving or deep undercutting. It is apparently capable of taking a certain degree of polish.

Note on the Relation of Half-rosette and Triglyph Friezes to the Incurved Type of Minoan Altar-base. By the Author.

Mr. Fyfe's view that the 'limit of division' in the half-rosette and triglyph bands was properly on the side of the square end of the half-rosette is borne out by a comparative study of some allied forms that certainly have a bearing on the origin of this architectonic motive. The opposed curves which form the central point of this decorative combination seem to connect themselves with a recurring type of Minoan altar-base of which an actual terra-cotta model (Fig. 380) was found with remains of the Miniature Shrine of M. M. II date from the East Wing of the Knossian Palace.[1] On a crystal intaglio from the Idaean Cave it forms part of a scene of tree worship with sacral horns above it.[2]

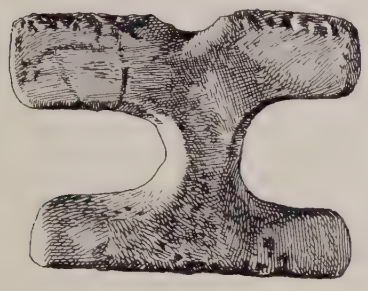


Fig. 380. Altar-base from Miniature Terra-cotta Shrine.

It constantly occurs as a base,—conveying the same idea of consecration,—for the baetylic column in the schemes of the Lions' 'Gate' class,[3] and in the case of the Lion's Gate itself we see two such incurved bases side by side (Fig. 381, *b*).

A very interesting early example of the architectural adoption of this motive is supplied by the façade, Fig. 381, *c*, from the 'Town Mosaic'.[4] In that case the outline of the incurved altar-base is framed in woodwork, and an essential feature in the later friezes is present in the upright central post, the predecessor of the dividing triglyph, in this place a structural necessity. On either side of the central framework, following the lines of a Minoan altar-base of this class, are two horizontal bars, and it looks as if the intervening open spaces had been used for lighting the interior of the building, so that we have a window arrangement of a symbolic kind. A kind of reminiscence of such a construction may be seen in the curious decorative curves, with central, horizontal bars, introduced into the imitation stone-work dado on each side of the throne at Knossos (Fig. 381, *d*).

In the altars above the little gold shrines of Mycenae, on the other hand, the incurved base is made to fill in a rectangular field by reduplicating its curious outlines (Fig. 381, *a*).

The central elongated oval interspace between the two juxtaposed bases of the Lions' Gate, Fig. 381, *b*, coupled with the half-ovals beyond on either side, has a special significance in connexion with the origin of the decorative bands.

These seem to have arisen from the endeavour to apply simple rows of rosettes, such as were early rife in Minoan ornament, to the filling in of such incurved designs. The tendency to elongate and to halve the rosette was a necessary consequence. The central support,

[1] *P. of M.*, i, pp. 220–2 and Fig. 166, ii.

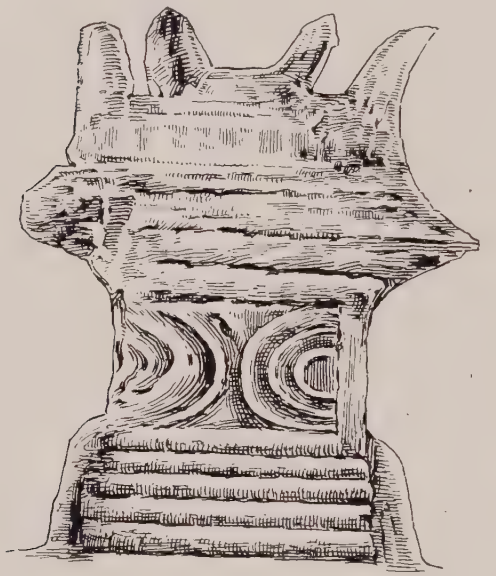
[2] *Op. cit.*, p. 220, Fig. 167, and cf. A. E., *Myc. Tree and Pillar Cult*, p. 43.

[3] *Ibid.*, p. 301 seqq. and Fig. 226, No. 31.

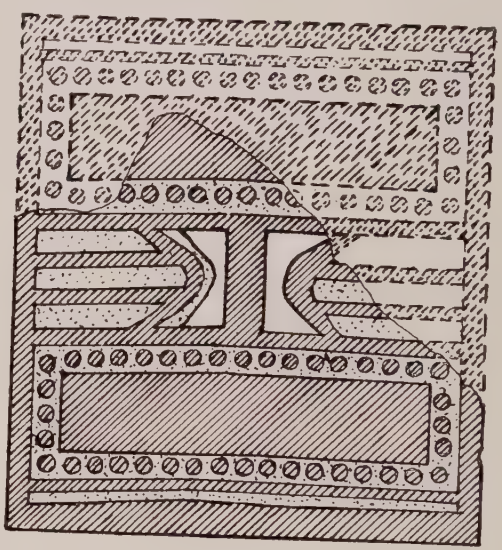
[4] *P. of M.*, i, Fig. 226 (opp. p. 306), No. 31

moreover, required by the structural arrangement as seen in Fig. 381, *c*, explains the intervening triglyphs of the friezes.

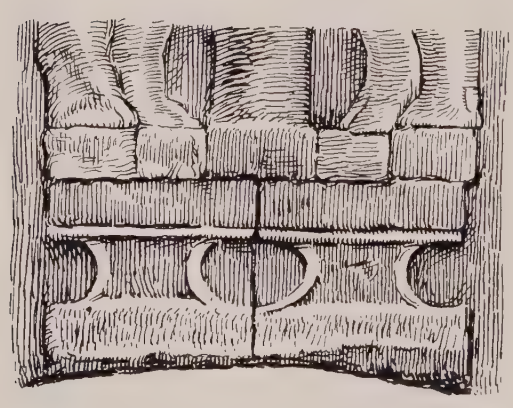
The connexion with the incurved type of altar-bases shows at the same time that there was an inherent religious element in this class of ornament.



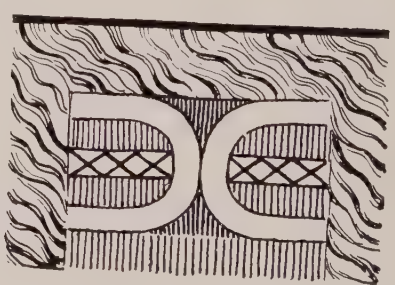
a



c



b



d

FIG. 381. *a*, ALTAR WITH INCURVED SUPPORT, MINIATURE GOLD SHRINE, MYCENAE; *b*, BASES OF LIONS, LION'S GATE; *c*, FAÇADE ON FAÏENCE HOUSE TABLET, KNOSSOS; *d*, FRESCO DESIGN BESIDE THRONE, KNOSSOS.

§ 59. The West Court: its Causeways and Altars; and North-West Treasure House.

Paved way leading from 'Theatral Area'; the West Court and its Causeways; Circular walled refuse pit—'Kouloura'—cleared out at intervals; Paved over in M. M. III b; Pavement of Court—earlier and later portions; Altar-base to North of Court; Base-blocks of earlier Palace façade; Frontage here later set back; Sanctity of interspace thus exposed marked by another altar; Steatite relief with isodomic altar and fig-tree in walled enclosure; Basements of 'N.-W. Treasure House', North of Court; Building restored in M. M. III b; Earlier store-house below—important ceramic relics; the 'N.-W. Pit'; Building enlarged in direction of Palace; Plan of 'N.-W. Treasure House'—entirely basements; Late 'Palace Style' amphoras; L. M. I a vessels on earlier floors; Palatial character of vases stored; Votive, sacral horns of bronze; Double Axes on intaglio and jars—similar cult symbols on later vessels; Fresco fragment on N. border—tree and bull-grappling scene—exceptional representation of tree; Discovery of palatial bronze hoard.

The West Court of the Palace: its Walled Pit and Altar-bases.

The West Court and its causeways.

About 18 metres beyond the North-West angle of the massive bastion described, the causeway that here entered the West Court, divided into two branches (see Plan, Fig. 369). In the section preceding this bifurcation it seems to have consisted of a double line of slabs, together of about the same width—1·40 metres—as the central pavement of the 'Royal Road', and this now branched off into two single lines of paved pathway. One of these proceeded almost straight across the Court, but with a very slight divergence to the left, towards the left wing of the West Porch. The other crossed the Court diagonally, making for a point just outside the North-West Angle of the protruding Palace wing on that side, where it would have joined a very ancient double line of paved way running West, which, as will be shown below,[1] had formed the original main approach to the West Entrance from that direction (see General Plan A, at end of Vol. ii, Pt. 2).

Circular walled rubbish pit—'Kouloura'.

This diagonal path passed near the borders of the circular walled pit (Fig. 382), about 5 metres in diameter, known to the natives as the 'Kouloura', of the same kind as that brought to light beneath the 'Theatral Area',[2] and the similar example on the borders of the West Court at Phaestos. The most reasonable explanation of these capacious walled structures is that they were intended as receptacles for refuse and rubbish, and thus fulfilled a sani-

[1] See below, p. 661 seqq.

[2] See above, p. 580, and cf. *P. of M.*, i, pp. 207, 208.

Cleared out at intervals.

tary function. In all cases they were found to contain quantities of sherds, bones, and other waste products. They certainly date from the earliest days of the Cretan Palaces, and there are good grounds for believing that they were cleared out at intervals. The 'Kouloura' of the West Court was found to contain throughout almost its whole depth sherds belonging to the

Fig. 382. 'Kouloura' or Walled Pit for Refuse and Rubbish, in West Court.

M. M. III phase; in the lowest stratum, however, there appeared—*per saltum*—a fair number belonging to M. M. II *a*. It would appear, then, that in this case the rubbish pit had been cleared out at the end of the latter Period, and again, apparently, at some intermediate time, probably at the close of M. M. II *b*. The walled pit under the 'Theatral Area' had, as we have seen, been finally covered over at the close of M. M. II *a*, and that of the Phaestos Court at the end of M. M. II *b*. In the present case, the ceramic remains belonged to the same stage as those from the Temple Repositories and other parallel deposits, and we may fairly conclude that the paving over of this 'Kouloura' was part of the extensive scheme of remodelling that set in at the beginning of the New Era, in the last, 'post-seismic' phase of M. M. III.

Paved over in M. M. III *b*.

The West Court seems originally to have stretched in a some-

FIG. 383. PAVEMENT OF WEST COURT JUST OUTSIDE THE WEST PORCH. SHOWING FORM OF ORIGINAL PAVING BLOCKS AND CAUSEWAYS E.–W. AND N.–S.

Character of pavement—earlier and later.

what narrow belt along the Palace façade for some forty metres, from the borders of the West Treasure House, to be described below, to the West Porch, and, again, flanking the old paved way leading West. It is clear, however, that at the beginning of the New Era it was considerably extended to the North-West. At first sight the older area looks more broken up, but this is the result of the splitting up of the large squared blocks of which it was originally composed by a process of gradual disintegration, as is well shown

Fig. 384. Altar-base in North Part of West Court.

just outside the West Porch (Fig. 383). The new pavement, which was from the beginning composed of smaller irregular blocks than the old, is traceable beyond the West borders of the 'Kouloura', where it was carried over the remains of Middle Minoan houses. In places, especially within the older area of the Court, remains of the hard cement with which the limestone blocks were originally covered are still to be seen, several centimetres thick, in the interstices.

Altar-bases of West Court.

Altar-base opposite N.W. Treasure House.

A little North-West of the point where the entrance causeway on that side bifurcated, and about midway between the diagonal line of paved path and the North-West building, is visible a square construction, 1·90 by 1·72 m. in dimensions[1] (Fig. 384). This must, in all probability, be regarded as part of an altar-base, though built of smaller and more irregular blocks than that set in a bay of the West wall of the Palace, to be mentioned below. It may have indicated the sacral character of the store-house beyond.

Base-blocks of earlier Palace façade.

Attention has been already called in the first Volume of this work to an interesting feature of the Eastern borders of the West Court—the appearance, namely, of a line of large slabs proceeding from near the Southern

[1] It was somewhat defective on the North-West side. A re-used block shows an early double-axe sign.

angle of the projecting Palace section on that side and curving inwards as it approached the West Porch (see General Plan A and Fig. 427, below).[1] These were, no doubt rightly, recognized as the massive base-slabs of the original façade line of the Palace on this side, and the great majority of the sherds underlying them proved to be Early Minoan or Neolithic.[2]

FIG. 385. ALTAR-BASE PLACED WITHIN THE OLD FRONTAGE OF THE WEST WALL. TO THE LEFT ARE SEEN THE BASEMENT SLABS OF THE ORIGINAL FAÇADE.

On the significance of the architectural change to which the existence of this older façade points, more will be said below.[3] The neighbouring section of the later West wall shows, at the back of all the adjoining Magazines from 1 to 8, a series of incised Double Axes,[4] which might be taken to represent a somewhat special consecration to the presiding divinity of Knossos. That, as a whole, the outer walls of the Palace Sanctuary were regarded as a religious enceinte—such as, in early Rome, was marked by the *Pomoerium* -may be inferred from cumulative evidences, though the sacred

[1] *P. of M.*, i, pp. 129-31, and Fig. 96.

[2] Of those examined under the second of these slabs from the North end, 146 were E. M. in general, 460 Neolithic, while 20 belonged to the earliest M. M. I phase (*op. cit.*, p. 129, note 4). The lower face of the third block from the North, examined in 1923, presented a group of signs.

[3] See p. 660 seqq.

[4] See Plan, *P. of M.*, i, p. 449, Fig. 322.

symbol was not always the same. When, then, the old Palace boundary was drawn in somewhat on a section of its West border a strip of specially consecrated ground remained exposed outside the new line.

Sanctity of interspace marked by another altar.

It is therefore a significant phenomenon that at this spot, between the earlier and the later wall line, and opposite a bay in the new façade, a square altar—for such we may reasonably regard it—was set up, of which the two massive slabs forming its base remain in place (Fig. 385). The consecrated nature of the old area was thus maintained.

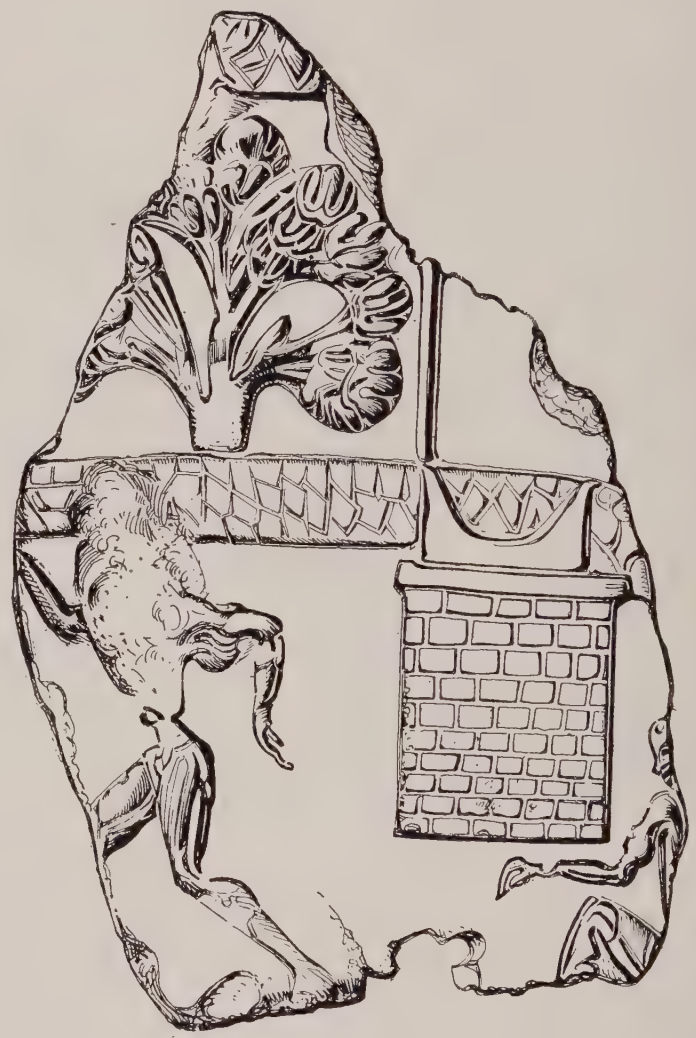


Fig. 386. Relief on Fragment of Steatite 'Rhyton', Knossos.

Altar and Temenos of Fig-tree Grove in Steatite Relief from Knossos.

Isodomic altar on steatite relief.

Happily one of the earliest relics found on the site of Knossos, a fragment of a grey steatite 'rhyton' with reliefs, obtained by me during my first visit in 1894,[1] affords a good illustration of such a square Minoan altar, Fig. 386. The religious character of the erection itself, constructed of exceptionally small isodomic masonry, is clearly marked by the sacral horn above its coping, recalling that similarly placed on the altar over the little

[1] See A. E., *Mycenaean Tree and Pillar Cult* (*J. H. S.*, xxi, and Macmillans, 1901), p. 3 [101] seqq. and Fig. 2.

gold shrines of the Third Shaft Grave at Mycenae.[1] There, on the horns of the side chapels are perched the doves of the Minoan Goddess, and, though on the fragment before us none is visible, the attitude of the half-kneeling man to the right, who seems to be sprinkling grain, may be not improbably taken as an indication that the sacred birds came into the design. Suggested interpretation of designs.

To the left of this is seen a sinewy Minoan youth, with the characteristic long locks of hair streaming from beneath his left arm, in free but rather violent action. The attitude of the hand held behind him with the open palm turned outwards essentially differs from that, with the clenched fist held under, that characterizes the Minoan boxers.[2] His right arm, again, is raised in a manner quite different from the forward thrust of these pugilists : the hand that is wanting might well indeed have grasped that of a partner in some ecstatic dance, inspired by the divine afflatus.

In the background is a walled enclosure, the more or less lozenge-shaped, and irregular blocks of which may be taken to represent the earlier rough polygonal style of wall-building, in contrast to the isodomic masonry of the altar. Within the enclosure is a fig-tree, the leaves of which are clearly delineated. On a gold signet-ring from the site of Knossos a group of trees, which from the trifid character of the leaves must also, in all probability, be identified with fig-trees, shows itself above the walls of a hypaethral sanctuary connected with the local pillar cult, and before which an adorant figure, perhaps the Goddess herself, is bringing down—we may suppose, by due incantations—a young male divinity in front of an obelisk.[3] Fig-trees in walled enclosure.

The fig-leaves, too, of gold-foil that appear among the cruciform ornaments nailed on to a coffin of the Third Shaft Grave at Mycenae[4] had surely a religious association. The manner, indeed, in which the wild fig-tree thrust its roots into the fissures of sacred rocks and overhung the mouths of holy caves would suggest its special sanctity, and this is also well marked in Early Greek religion, witness the sacred fig-tree, the gift of Demeter, beside the tomb of Phytalos,[5] which gave his spirit undying

[1] Schliemann, *Mycenae*, p. 267, Fig. 423; Schuchhardt, p. 199, Fig. 183.

[2] As, for instance, those seen on a fragment of another steatite 'rhyton' from Knossos (*P. of M.*, i, p. 689, Fig. 510), and on a clay seal-impression from the Temple Repositories (*ibid.*, Fig. 509). Compare, especially, the steatite 'rhyton' from Hagia Triada (Halbherr, *Memorie del r. Istituto Lombardo*, xxi, Pl. II, Fig. 3, and cf. *P. of M.*, i, p. 690, Fig. 511).

[3] See *ibid.*, i, pp. 159, 160, and Fig. 115, and cf. *Myc. Tree and Pillar Cult*, pp. 72, 73 [170, 171], and Fig. 48.

[4] Schliemann, *Mycenae*, p. 292, Fig. 291; Schuchhardt, p. 192, Fig. 168. The leaves were identified by me (*Myc. Tree and Pillar Cult*, p. 6), and their significance pointed out.

[5] Pausanias, i. 37.

habitation. The *Ficus ruminalis* at Rome may itself fit on to a still more ancient Mediterranean cult.

That in the fragmentary relief before us we see a part of a sacred grove,[1] surrounded by a *temenos* of primitive walling, may be fairly assumed. The post-like object rising beyond the wall behind the horn on the left may possibly belong to a symbol in the shape of an impaled triangle that frequently recurs in association with sacral groups on Minoan seal-stones.

The North-West Treasure House.

Basements of Treasure House to N.W. of Palace.

On the Northern borders of the West Court, about 10 metres beyond the first of the altar-bases mentioned above, immediately opposite the North-Westernmost angle of the Palace containing the Sanctuary Hall, there came out a large and irregular group of basement spaces which, from the character of their contents, had in all probability belonged to a treasure house connected with the Palace cult (Fig. 387).

Restored in M. M. III *b*.

The agglomeration of basement spaces here disclosed seems, on the whole, to go back to the great epoch of restoration at the beginning of the New Era (M. M. III *b*). This had subsequently suffered from a widespread destruction, of which there are other evidences, in the mature L. M. I *a* phase. It seems to have been partially restored in the succeeding epoch, and finally, at its close, to have shared the fate of the neighbouring Palace.

Earlier store-house below: important M. M. II, &c., ceramic remains.

This North-West Treasure House, as it may be not inaptly called, overlaid, however, throughout the greater part of its area the stumps of earlier walls, resting on the Neolithic clay but themselves associated with polychrome pottery belonging to the earlier half of the Middle Minoan Age. So abundant were these remains that it seems reasonable to believe that this earlier building was also a store-house connected with the Palace. It was, indeed, on a floor level about three metres below the surface, belonging to this earlier structure, that the most elaborately decorated polychrome vase yet known was discovered which has been reproduced in a Coloured Plate (III) of the previous Volume.[2] The Westernmost wing of the later building was largely built over a capacious pit, chock-full of more fragmentary remains of vessels, many of them supplying good illustrations of the early polychrome fabrics (M. M. I–II).[3]

'The North-West Pit'.

[1] The fracture on the right seems to connect itself with the outline of a bough of a second fig-tree.

[2] See, too, *P. of M.*, i, p. 246, Fig. 186, *a*, and p. 247.

[3] See *Knossos, Report*, 1904 (*B. S. A.*, x) p. 16, Fig. 5, 1, and p. 17, Fig. 6. The lower part of a beautiful egg-shell vase from this deposit is shown in *P. of M.*, i, p. 246, Fig. 186, *g*.

The pottery here went down to six metres below the surface, and this 'North-West Pit' suggests, indeed, a close parallel with the round walled pits like the 'Kouloura' above,[1] placed beside the courts and open spaces of the Minoan Palaces for the accumulation of rubbish.

Beneath the floor level and later walls, North of D in the Plan, Fig. 387, there was brought to light, together with quantities of polychrome sherds, what appears to be the North-East corner of the earlier building, socketed in the Neolithic clay, and already, like the later building on this side, showing an orientation in conformity with that of the Palace.

Building enlarged in direction of Palace.

It is curious to note that while the outer wall of the earlier structure on the East side runs about 12 metres distant from the corresponding section of the Palace façade, the line of the new building, dating from the beginning of the New Era, was brought forward as much as two metres, reducing the interval to about ten.[2] The distance of the South-East corner of the new building from the projecting N.W. Palace Angle referred to above was itself, as already noted, only about three and a half metres, the gangway from the 'Theatral Area' to the West Court passing through the narrow opening. Otherwise, the whole Northern flank of the West Court was blocked by this North-West building. That what appears to have been a large store-house of this kind should have thus been allowed to intrude on the Palace precincts and partly to block the access confirms the view that we have to do with a treasure house in connexion with a Palace sanctuary.

Plan of 'N.W. Treasure House': entirely basements.

The plan of the later 'North-West Treasure House' is given in Fig. 387, so far as it has been possible to recover it in view of the entire absence of such explanatory features as door openings or stairs that occur in ordinary house-plans. What we have seem to be entirely basements, and wooden steps or ladders must have been the only means of access. The gypsum column base found in position on the North side, itself, apparently, belonged to a basement room and stood on an ordinary floor of beaten clay, two metres below the surface. On a similar floor at the same level in a chamber, D, about South of this, were found, in their original position though broken,

[1] P. 610, Fig. 382, and cf. *P. of M.*, i, p. 207 and p. 551.

[2] It seems possible that at a somewhat later date—L. M. I *b* or L. M. II—the Eastern boundary of this building was withdrawn as far as the second line of basement spaces (5 and 6), the wall of which on this side presents some signs of having been intended for an exterior wall. It was in Space 6 that the L. M. II amphoras were found. M. M. III *b* was, indeed, the age of maximum intrusion on the Palace precincts—witness the S. House and that within the old South-West Quarter. But it must be remembered that here we have to deal apparently with a store-house or treasury connected with a sanctuary, in any case not with a private dwelling-house.

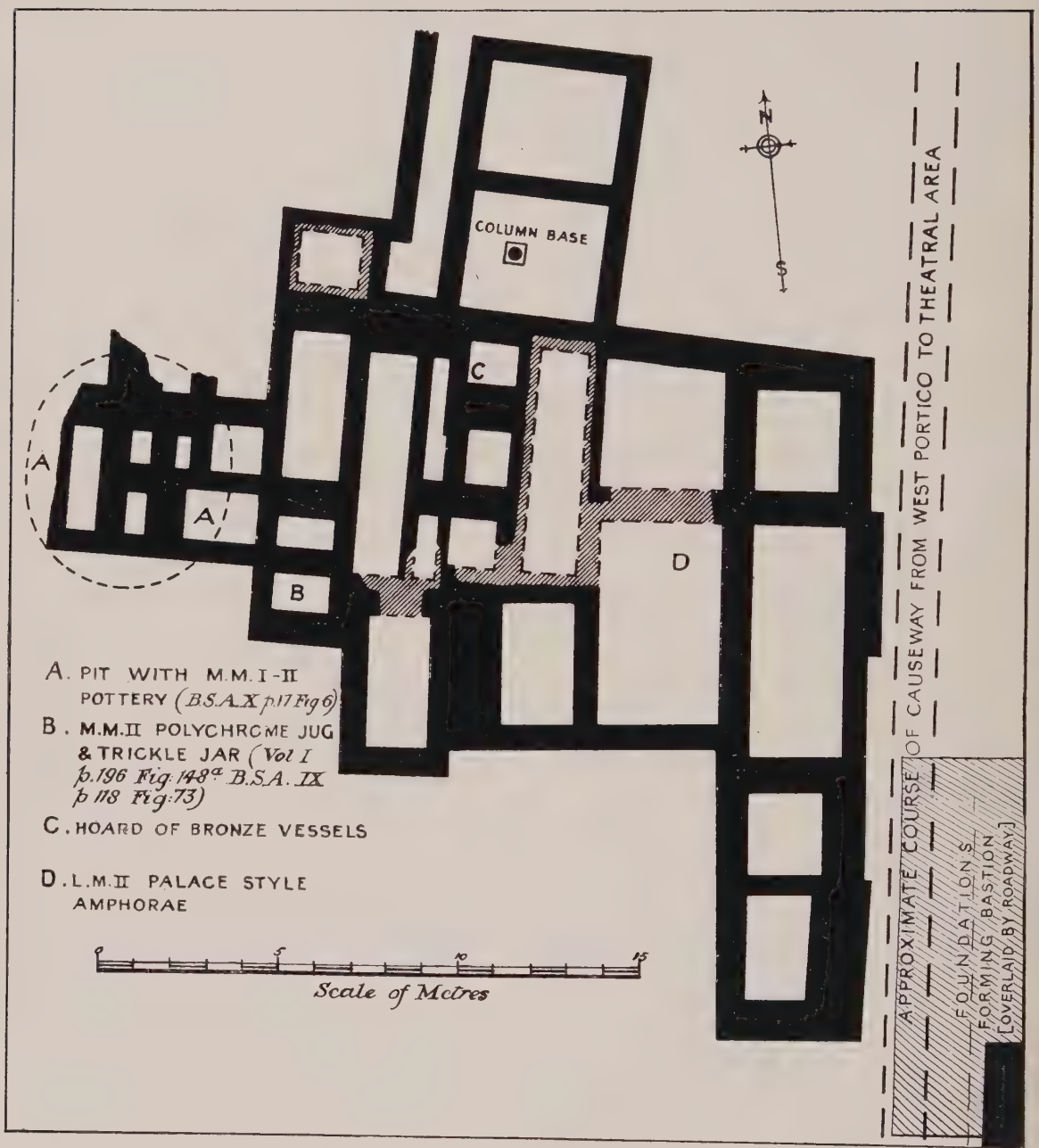


FIG. 387. PLAN OF 'NORTH-WEST TREASURE HOUSE'.

two amphoras of the late 'Palace style', one showing an octopus, the other conventionalized papyrus sprays. Elsewhere, however, on the original floor levels of the later building pottery occurred belonging to the earlier phase of the First Late Minoan Period. Here was found a bowl decorated with sprays of flowering olive (Fig. 282, *b*, p. 475, above) and part of a large vessel (Fig. 277, p. 471, above), depicting, in the new brown on buff style, the beautiful wild pea motive of which specimens representing the last M. M. III style have been already illustrated.

Late 'Palace Style' amphoras.

L. M. I *a* vessels on earlier floors.

Fig. 388. Agate Intaglio from 'North-West Treasure House', completed.

There can be little doubt that the vases and other relics stored here were the property of some Palace sanctuary. Apart from the exceptional splendour and calibre of some of the relics, several direct evidences of a sacral connexion came to light. In the earlier deposit, overlaid by later floors in L. M. I *a*, occurred a pair of miniature bronze 'Horns of Consecration', and the half of an agate intaglio of the 'flattened cylinder' form,[1] also found here, shows the Double Axe itself rising from the head of a sacred bull (Fig. 388). On some fragments of large amphoras, again, from the L. M. II stratum, Double Axes appear, as on several painted vessels of the same kind found both inside and outside the neighbouring section of the West façade of the Palace, and belonging to some sanctuary hall above. It is to be observed, moreover, that, whereas vessels of this class, such as those found in tombs and even in the 'Little Palace', are of decidedly lesser dimensions, those found in the North-West Treasure House were of full palatial height.[2]

Palatial character of vases stored.

Votive sacral horns of bronze.

Double Axes on intaglio and jars.

There is, indeed, evidence that the site of this building still, in one way or another, continued to be associated with the central cult of Knossos long after the overthrow of the Palace itself. A part of the broad triple support

Similar cult symbols on later vessel.

[1] This 'flattened cylinder' form of intaglio, as noted in *P. of M.*, i, p. 675, plays an exceptionally prominent part in M. M. III, after which Period it has a tendency to become less frequent, and finally disappears. The present specimen may be of L. M. I *a* date. A seal-impression showing a bull's head with the axe between his horns in a very fine M. M. III style was found in the Domestic Quarter. The onyx lentoid with a similar type from near Argos (*P. of M.*, i, p. 435, Fig. 312, *b*) is more or less contemporary with Fig. 388.

[2] These amphoras will be considered, together with others in the later 'Palace Style', in the third Volume of this work. One of the more completely preserved showed a design of conventionalized papyrus tufts, another an octopus and marine elements in the L. M. II style.

of a circular L. M. III *b* stand presented a fourfold design in which Double Axes with leafy shafts are twice repeated, rising from sacral horns—quartered in the other compartment by a fish and a decorative outgrowth of an argonaut[1] (Fig. 390: at end of Section).

Fresco fragment on N. border: Tree and Bull-grappling scenes.

On the Northern border of the building, where it overlooked the 'Theatral Area', was also found part of a painted stucco design (Fig. 389) in a late style, showing a tree and the forelegs of a charging bull, while above are waving locks of hair that evidently belong to a taureador who had been tossed in the air. The tree itself might at first sight be taken to be an oleander, but what look like lanceolate leaves really turn out to contain branches with the outlines of foliage within. This is an unique variation of the Egyptian and Minoan convention representing the masses of foliage and branches within a single outline.

Exceptional manner of representing tree.

The latter manner of delineating a tree is already seen in the Egyptian ideograph that goes back to the early dynasties.[2] In decadent Minoan and Mycenaean fresco designs it is unreservedly adopted, and finally results in the toy-box class of trees seen in the background of the hunting scene of the later Palace at Tiryns, where the branches are packed into symmetrical balloon-shaped spaces with yellow borders.[3] In the fine style at Knossos represented by the miniature painting of the 'Grove and Sacred Dance' the foliage of the olive trees is depicted in darker colour against a blue ground, without any linear border, giving the undulating contour of the general mass. On the other hand the myrtle shoots of the 'House of the Frescoes' and the 'Partridge Frieze' are naturally rendered with the separate leaves and stalks, a method also practised by the Egyptians. In the present case we see a hybridization of the two traditions, resulting in a kind of 'pseudo-naturalism'—what look like the veined leaves of a branch being themselves intended for branches, each within a separate linear outline. This eclectic representation may well belong to the close of the Palace period.

Discovery of palatial bronze hoard.

The most convincing evidence of the true purport of the building itself, with its agglomeration of small basement spaces and cist-like cavities, as a store-house of sacred vessels was supplied by a truly dramatic find. In one of these walled pits, not more than 2 metres by $1\frac{1}{2}$ in dimensions, some loose earth fell away disclosing what at first sight appeared to be a 'nest' of

[1] See A. E., *Knossos, Report*, 1903, p. 115, Fig. 71.

[2] F. Ll. Griffith, *Mastaba of Ptahhetep*, p. 24, and see above, pp. 202, 203.

[3] G. Rodenwaldt, *Tiryns*, ii, Pl. XII (restored), and p. 98, Fig. 40.

Fig. 389. Fresco Fragment showing Tree and Part of Bull-grappling Scene, North-West Treasure House.

bronze cups arranged on their sides.[1] On further clearing out of the deposit, however, it turned out that the supposed cups were the handles of a pile of four large bronze basins presenting magnificent foliate and floral ornamentation in relief, accompanied by a richly decorated ewer in the same metal. In view of this discovery, coupled with the religious character of the relics already described, we have every reason to recognize in this building the Treasury and Annexe of a Palace Shrine.

[1] For the first account of this discovery, see A. E., *Knossos, Report*, 1903 (*B. S. A.*, ix), p. 121 seqq.

Fig. 390. Support of Clay Base of a Circular Stand (L. M. III *b*) from Superficial Layer, North-West Treasure House.

§ 60. Palatial Bronze Hoard from North-West Treasure House and Contemporary Deposits from Private Houses.

Palatial hoard of bronze vessels from North-West Treasure House—a culmination of series in private houses; Their M. M III b*–L. M. I* a *date; Similar hoards at Tylissos, Mochlos, and H. Triada; Copper ingots; Ingots borne by 'Aegeans' on early Egyptian relief; Why were these hoards left derelict? Evidences of catastrophe in L. M. I* a*; A partial desertion of site contemporary with Overseas settlements; Tradition of Sicilian Expedition archaeologically confirmed; But break in continuity at Knossos only partial; Bronze deposits in private houses—N.W. House; Hoards in S. House and neighbouring basement bronze saws; Hoard in basement cell by 'Stepped Portico'; Metal service illustrated on clay tablet; Early Minoan prototypes of later bronze vessels; Types of vessel in 'Tomb of Tripod Hearth' (L.M. II); The palatial hoard in 'N.W. Treasure House'; The large basins—ceramic copies of foliate decoration; Basin with 'Sacral Ivy' pattern; Basin with tufted lilies and beading—compared with jewellery of Priest-King relief; The bronze ewer paralleled by specimen from Fifth Shaft Grave, Mycenae; Comparisons with ewer of Senmut's tomb—L. M. I* a *vase types there depicted; Minoan Figurine of galloping bull in tomb of User-amon compared with bronze example from Crete; Galloping bulls represent sacral type; Standing bull; M. M. III prototypes of tributary gifts from Keftiu; Bronze vase with marine reliefs and Minoan* Genii *from Cyprus; Were there already Minoan plantations on the Coast of Cyprus or Cilicia? L. M. I* b *bull's head 'rhytons' imitated in Pontus.*

Series of Bronze Deposits buried by Catastrophe of L. M. I*a* Date.

Bronze hoards in town-houses of Knossos.

The truly palatial hoard of bronze vessels found in the basement cell of the Treasury building North of the West Court is really a culmination of a series of bronze deposits brought to light in the town-houses explored. The consideration of these has been reserved for this place, since, together with the former, they supply a conspectus, not to be paralleled from any other sources, of forms of bronze vases and implements, all belonging, as their context shows, to the transitional M. M. III *b*–L. M. I *a* phase of culture, and none of them later than the earlier phase of the First Late Minoan Period. That, even when accompanied by vases of that epoch, metal objects may tend to belong to a slightly earlier date than the associated pottery is a reasonable conclusion, and it has already been shown[1] that a bronze ewer

M. M. III *b*–L. M. I *a* date.

[1] See above, p. 436 and Fig. 253, B and F.

type from one of these deposits is already reproduced in a L. M. I *a* clay vase with typical decoration, found in the 'House of the Frescoes'.

Similar hoards at Tylissos, Mochlos, and H. Triada.

To these finds may be added the contemporary group of huge cauldrons reproduced above (Fig. 355, p. 569), from a house at Tylissos, and the 'two astonishing hoards' of bronze basins found by Mr. Seager in the basements of L. M. I houses at Mochlos,[1] a specimen from which, illustrated below,[2] affords close resemblances to those of our Palace 'Treasure House'.

Copper ingots.

The remarkable preservation of treasure in repositories of this epoch is illustrated in another direction by the hoard of copper ingots, often inscribed with signs, from the Little Palace of Hagia Triada (cf. Fig. 391), to which reference has already been made.[3] Another example was found with the great bronze cauldrons at Tylissos,[4] and others in the East of Crete as well as Old Salamis in Cyprus, at Mycenae, Chalkis, and elsewhere in Mainland Greece, and even as far afield as Sardinia.[5] A fragment of one, the solitary survival of great treasures, occurred in the Long Corridor of the Magazines at Knossos,[6] where representations of these appear on a whole series of clay tablets of the Linear Class B.[7]

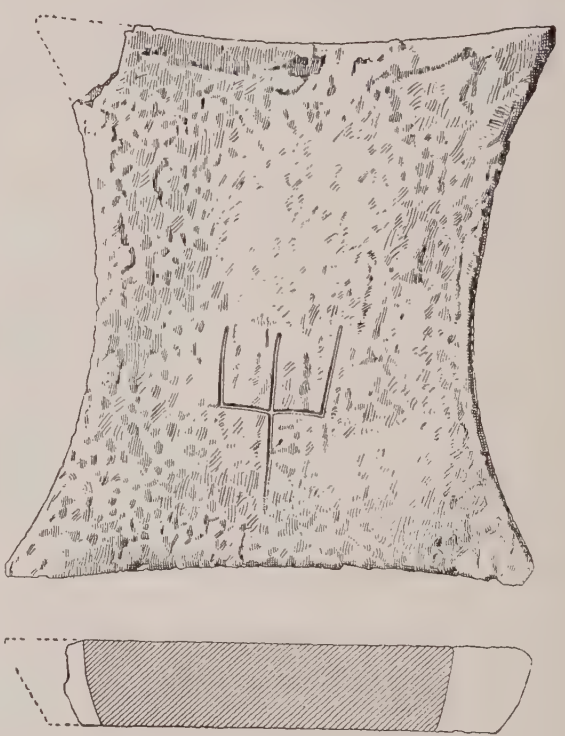


Fig. 391. Bronze Ingot from Hagia Triada.

[1] *Excavations at Mochlos* (*American Journ. of Archaeology*, vol. xiii, 1909), pp. 286–8, and Figs. 10, 11.

[2] See below, p. 644, Fig. 409 B.

[3] R. Paribeni, *Rendiconti della R. Accad. dei Lincei, Cl. Sc. Mor.*, ser. 5 (vol. xii, p. 317 seqq.).

[4] Hatzidakis, Τυλισσὸς Μινωϊκή, p. 221, Fig. 31.

[5] See, especially, L. Pigorini, *Pani di rame provenienti dall' Egeo, scoperti a Serra Ilixi in Provincia di Cagliari* (*Bull. di Pal. It.*, 1904, p. 91 seqq.).

[6] In 1902 (in disturbed earth). Owing to an erratum, this is mentioned in my *Minoan Weights and Currency* as having been found near the 'East' magazines.

[7] A. E., *Knossos, Report*, 1900 (*B. S. A.*, vi), pp. 57, 58, and, especially, *Minoan Weights and Mediums of Currency, &c.*, in *Corolla Numismatica*, 1906, p. 355 seqq. Full details will appear in my *Scripta Minoa*, vol. ii, and in vol. iii of this work.

A specimen from Hagia Triada weighing 27 kilogrammes is illustrated in Fig. 391.

Ingots on early Egyptian relief.

These ingots, with their incurved sides, are the lineal successors of the bored oblong ingots that we have already seen on the Egyptian sepulchral relief, dating from the beginning of the Middle Kingdom, carried on the shoulders of foreign tributaries who may well be Cretans.[1] The incurved type—better adapted for porterage—now appears, at a date only a little later than that of the bronze hoards above mentioned, among the gifts offered to Eighteenth Dynasty viziers, and borne in a similar manner on the shoulders of men whose Minoan origin cannot be doubted, though ingots of this shape are also carried by foreigners who are not Cretans.

Why were these hoards left derelict?

These various deposits of treasure—to which the silver service from the South House may be added—all belonging to the same epoch, and left as they were stored—how is their continual recurrence over such an extensive area at Knossos and beyond it to be explained? Why were they never recovered by their owners, though in many cases they must have been of comparatively easy access?

The problem increases in magnitude when it is borne in mind that the private houses and buildings, wholly or partially explored, in the neighbourhood of the Palace only represent a small fraction of what was evidently the prosperous burgher quarter of the City. Of those excavated, a bronze hoard has occurred, approximately speaking, in every third house, and we must yet remember that the remains themselves had been ransacked for every kind of precious object by treasure-hunters—Minoans, Greeks, Romans, Arabs, Byzantines, and Turks—for some three and a half thousand years. How much more treasure must originally have been left in them, how many times over must we multiply the volume of that which has been brought to light by more or less casual and sporadic excavation on a very limited scale!

Was this Dereliction of Possessions due to a Shifting of Population?

Evidences of catastrophe in L. M. I *a*.

The phenomenon that we thus have before us is of profound historic significance, and points, at least, to two probable conclusions. It is clear that there was some widespread partial destruction at Knossos during the earlier phase, *a*, of L. M. I—or somewhat later than 1550 B. C.—though the Palace itself seems to have been affected in a minor degree. There is a possibility, in view of the earlier and later history of the site, as described in a previous Section, that this destruction was due to a new seismic disturbance. The change from the A to the B form of linear script about this

[1] See above, pp. 176–8, and Fig. 90.

epoch may even point to a change of dynasty. This widespread relinquishment of hoarded treasure on the part of the householder in any case points to a wholesale quitting of the site.

This Desertion corresponds with Intensive Colonization beyond the Aegean.

Partial desertion of site: corresponds with overseas settlements.

It can hardly be an accidental circumstance that these signs of a general shifting, on the part, at least, of the well-to-do inhabitants of Knossos, correspond with the evidences of a great accession to the Minoan population in Mainland Greece. To whatever extent the Morea and neighbouring tracts beyond the Gulf were already in Minoan hands in the preceding Age, going well back into M. M. III, few archaeologists probably would deny that towards the close of the first phase of the First Late Minoan Period the evidences of an intensive occupation from the side of Minoan Crete become almost universal. The culture, in fact, from this time stands forth as overwhelmingly Minoan, and it is only about the close of the succeeding Period, answering to the Cretan L. M. II, that it begins to betray a differentiation on provincial lines that makes the term 'Mycenaean' more admissible.

Sheer terror, inspired by the renewed manifestation of the destructive Power of the Underworld, and, at the same time, the new promises held out of successful settlement overseas may well have combined to give a sudden impulse to emigration *en masse* to the shores of the Argolid or other parts of Mainland Greece. As with many emigrants, the idea of returning, fortune made, to re-enter into old possessions may have been present in the minds of many of those who now crossed the Aegean. But they never returned. A void, never again to be wholly filled, was left on Cretan soil.

Tradition of Sicilian Expedition archaeologically confirmed.

There are some indications that this overseas movement extended far beyond Greece itself. In Sicily we find a deeply rooted tradition, set forth in some detail by Diodorus,[1] of the refuge there of Daedalos, fleeing from the angry lord of Knossos to the Sikan king Kokalos, and of the pursuit of King Minos, who founds the Western Minoa and finds a splendid tomb in the Island. His army is left behind—cut off by the burning of the ships—to form a Cretan settlement, later increased by the arrival there of his son Meriones with a further contingent. More than this, however, there is some definite archaeological evidence of a Minoan connexion with Sicily, going back to the very era with which we are at present concerned. Over and above the occurrence of imported specimens of later pottery of the diffused Mycenaean class (L. M. III *b*), a characteristic bronze rapier type[2] and a

[1] Diodorus, iv, c. 76–9; v, c. 78.

[2] P. Orsi, *Necropoli Sicula presso Siracusa con vasi e bronzi Micenei* (*Mon. Ant.*, ii), Pl. II, Figs. 5, 14, and 23. (Cozzo Pantano.)

painted vase with reed or grass decoration[1]—both of native fabric—can only be regarded as lineal descendants of Cretan prototypes not later than the earlier phase of L. M. I and developed locally on native lines.[2]

In Eteocretan tradition the fall of Minos and the depletion of the Island of its old inhabitants was thus connected with this distant Sicilian Expedition. But the much more intensive colonial movement on the side of Mainland Greece was doubtless a more potent cause of the partial desertion of the site which the dereliction of treasure on such a scale seems to imply.

Only partial break in continuity at Knossos.

That there was at this time an extensive break in the continuity of the more well-to-do households is clear, but it is necessary to point out that this conclusion must not be carried too far. There can be no doubt that Knossos remained for many generations an important urban centre. The Palace, at most after a brief set-back, continued to flourish, as did some of the most important habitations around, such as the 'Little Palace', the 'Royal Villa', and the 'Caravanserai'. The temporary void caused by the later overthrow that marks the close of the Palace period was itself quickly filled up by new settlers who, though poorer, were more numerous. The real dereliction of the Palace site and a large part of its surroundings was the result of new intrusions from the North at the very end of the Minoan Age.

Series of Bronze Deposits in Private Houses at Knossos.

Bronze deposits in the private houses.

Hoard of N.W. House.

One of the best examples of a hoard of bronze objects at Knossos occurred in the basement of a house North-West of the Palace, equidistant with the 'Northern Pillar Crypt', and about 36 metres West of it. The deposit, which lay in a built, closet-like recess, was shown to be of exceptionally early date, by the occurrence, together with the bronzes, of somewhat rough painted pots, one of them (Fig. 392, 2) presenting large dark disks on the buff ground, which are of the Earliest Middle Minoan tradition. This disk ornament,[3] as we learn from the Pachyammos Cemetery,[4] still survived to M. M. III, but it is impossible, in view of other comparisons there sup-

[1] *Ibid.*, Pl. I, Fig. 8.

[2] See my remarks in *The Prehistoric Tombs of Knossos* (*Archaeologia*, vol. lix), pp. 108, 109. For the reed or grass ornament so characteristic of L. M. I *a* at Knossos, see above, p. 549, Fig. 349 (pottery from Gypsàdes well). The reed decoration in white on black goes back to M. M. III. The rapier form itself finds its earliest approximately dated prototype at Knossos in association with an inlaid stone bowl of M. M. III *a* type (A. E., *The Tomb of the Double Axes* (*Archaeologia*, lxv), p. 4, Fig. 7).

[3] See above, pp. 185, 186, and Fig. 97.

[4] Seager, *The Cemetery of Pachyammos, Crete*. Compare the M. M. III vessels on Pl. XX. The form of the present jar (Fig. 392, 2) corresponds with Pl. XX, 1 (Tomb XIX), and the broad coils of Fig. 392, 3 are similar to those of Pl. XX, 2 (Tomb XXI *a*), 4 (Tomb XX).

FIG. 392. HOARD OF OBJECTS FROM HOUSE ON NORTHERN BORDER OF PALACE.

plied, to bring this specimen down later than the close of that Period. Fig. 392, 3 is probably of the same date. At the time of excavation the remains of this house were supposed to belong to the beginning of the 'New Era' then included in L. M. I *a*. Whether, in view of the above comparisons, it really belonged to the last phase of the Middle Palace or to the 'post-seismic' phase of M. M. III, it is clear that the bronzes here found come within the limits of that Period, and must be dated therefore not later than the first half of the sixteenth century B. C. The types, in any case, fit on to those of the other hoards.

The bronze objects were in very perfect condition and coated with a bright green patina. Among them was a tripod cauldron with expanding lips, three horizontally projecting handles, and a slightly rounded bottom, resting on struts proceeding from the upper part of the legs (Fig. 392, 1). It was 38 centimetres high and about the same in its upper diameter. This form of tripod, which recurred in other hoards, is really the remote ancestor of the classical 'tripod-*lebes*' with its much higher legs and vertical handles.[1] The associated implements and weapons consisted of three Double Axes (Fig. 392, 4, 5, 6), four perforated double-edged adzes, a long chisel or plane (12), four dagger-blades with triple rivets, and a section of the upper part of a sword, with an incipient flange to the lower part of its tang (the top of which is broken off) and slightly projecting shoulders supplying the antecedent stage to the 'cruciform' type[2] common in the last Palace Period (L. M. II). With the bronzes was a curiously shaped whetstone (18) with tortoise-like head.

Hoards of S. House and neighbouring basement.

In the inner store-room of the basement of the South House had been deposited a hoard consisting entirely of bronze tools or implements (Fig. 393). Among these were three saws (*d*, *i*, *j*) and the bronze collars or casings for their wooden handles, a new feature (*b*, *c*). *a* is a perforated 'axe adze', of a type which has a very early history in Crete;[3] *e* and *f* are Double Axes of the usual kind, and *g* and *h* two-edged knives, in the latter case with the hilt.

In the basement of a neighbouring house a little to the South-East of the South House, and which, like it, ceased to be inhabited in the early phase of

[1] For a more advanced, L. M. II type, see below, p. 634, Fig. 398.

[2] See A. E., *Prehistoric Tombs of Knossos*, p. 110 (Fig. 112), and Pl. CXI, Fig. 109, 36, i, 42*a*, 43*a*, 58*a*. All the specimens from the Zafer Papoura Cemetery showed a well-developed median rib, which in the present case is conspicuous by its absence.

[3] In Mr. R. B. Seager's collection was a miniature gold axe-adze from an E. M. II deposit.

FIG. 393. DEPOSIT OF THREE BRONZE SWORDS AND OTHER IMPLEMENTS FROM INNER STOREROOM OF SOUTH HOUSE.

FIG. 394. HOARD OF BRONZE OBJECTS FROM HOUSE S.E. OF SOUTH HOUSE.

L. M. I, occurred another interesting bronze hoard, closely massed together (Fig. 394). It included two very fine tripod cauldrons, one of which (No. 2) was a good deal larger than that of the 'North House' described above, attaining, indeed, a height of 60 centimetres and a diameter of 61 cm. These cauldrons

Fig. 395. Hoard of Bronze Vessels in Basement Cell by Stepped Portico: E, Painted Ewer; P, Stone Lamp; I, Stone Cup.

had two projecting horizontal handles. With them was the two-handled pan (Fig. 394, 4), and a fine ewer (No. 1) with a second ring-handle below the other near its base, by means of which it could be tilted. It was 60 centimetres high. This jug is of the same form as those of the Fourth and Fifth

Shaft Graves at Mycenae, in each of which seven specimens were brought out.[1] Another occurred in Grave II.[2] The associations in which these vessels were there found point to M. M. III and L. M. I *a*.[3]

The most remarkable object, however, was a bronze saw (Fig. 394, 5) of the great length of 1·63 metres (about 5 ft. 4 in.). Another very large saw belonging to the same epoch was found at Hagia Triada, and the size and abundance of these implements may point to their having been largely used for sawing out the gypsum slabs that were now in such requisition for buildings. In works of restoration we found saws to be very useful for slicing this material, here so abundantly forthcoming.

Hoard of bronze vessels in basement cell by 'Stepped Portico'.

Further evidence of a bronze hoard of the same class as the above was supplied by a deposit found in connexion with the stumps of two walls, about 20 metres South-West of the angle of the 'South House' on that side and immediately North of the remains of the East-West Section of the 'Stepped Portico'.[4] The objects—reproduced in Fig. 395—had evidently been stored in a basement cell of a house of the 'New Era', and in two cases afford valuable chronological indications. The painted ewer (E) found with the bronzes belongs to the early phase, *a*, of L. M. I. On the other hand, the spouted bronze jug (M) has already been illustrated as supplying the model of an early L. M. I vessel found in the 'House of the Frescoes'.[5] Five shallow basins (as A, B, C) supply plain examples of the class that we shall see so brilliantly illustrated by the more decorative examples found in the palatial treasure described below. Five broad pans were found, with two upright handles, representing a type of earlier Middle Minoan tradition, also

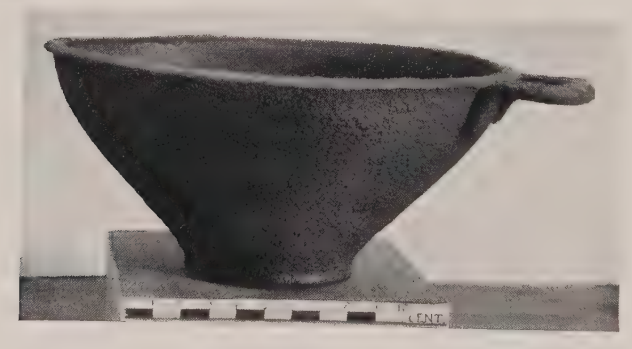


Fig. 396. One-handled Bowl (N), Profile View.

[1] Schliemann, *Mycenae*, p. 274, Fig. 436; Schuchhardt, *Schliemann's Excavations*, p. 244, Fig. 245, and p. 267 (Grave v).

[2] Schliemann, *op. cit.*, p. 331: 'Grave ii' is his 'Grave i'.

[3] A very similar 'bronze ewer' from Palaikastro (R. M. Dawkins, *B. S. A.*, Suppl. Paper, No. 1, Part I, p. 121, and Pl. XXVI) was found with 'a considerable amount of L. M. II pottery' which would show that the type survived.

[4] See above, p. 161.

[5] See above, pp. 435, 436, and Fig. 253, B.

translated into stone.[1] The one-handled bowl (N), on the other hand, of which a profile view is given in Fig. 396, seems to be of a novel form. With the bronzes came to light two small stone vessels, a lamp (P), and a 'bird's-nest' cup of a shape of Early Kingdom Egyptian origin, already taken over by Cretan lapidaries in M. M. I. Embedded in this deposit there was also discovered a red cornelian bead-seal of the 'flattened cylinder' form, the intaglio design of which will receive special illustration below.[2] It shows the Minoan Goddess wreathed with snakes as Lady of the Underworld, holding the insignia of temporal and spiritual dominion.

Clay Tablet referring to Services of Metal Vessels: from Palace (L. M. II).

Meta services on clay tablet.

An interesting tablet of the date of the Linear Class B of the Script and belonging to the last Palace Period contains two inventories relating to what seems to be separate sets of metal vessels (Fig. 397). Although later in point of time, the types here represented answer very closely in outline to those of these domestic hoards. Thus in the first of the two groups we see a bowl with vertically set handles, which may be regarded as a variant of those of that class shown in Figs. 395 and 398, *c*. The high-spouted vessel, on the other hand, contained in a basin like those of the above deposits, recalls the silver 'cream jug' found with three bowls of the same metal in the South House[3] and, there, clearly forming part of a service.

FIG. 397. CLAY TABLET REFERRING TO SERVICES OF METAL VESSELS.

It also recalls the silver jug with a beaked spout from the Fourth Shaft Grave at Mycenae,[4] and the gold *oenochoê* with repoussé spiral work from the same tomb.[5] The latter vase, in turn, both in form and decoration, takes us back to the small faïence jug from the Eastern Temple Repository at Knossos,[6] itself based on an original in precious metal, and affording clear proof that this type goes well back into the Third Middle Minoan Period.

There was a tendency of certain metal forms to survive, partly, no doubt, because, owing to the greater durability of the material, old specimens

[1] Compare the steatite bowls from Palaikastro (R. C. Bosanquet, *B. S. A.*, Suppl. Paper, No. 1, Part I, p. 134, Fig. 115), where, however, the handles are less upright.

[2] See below, p. 793 and Fig. 517.

[3] See above, p. 387 and Fig. 221.

[4] Schliemann, *Mycenae*, p. 243, Fig. 353.

[5] *Op. cit.*, p. 232, Fig. 341.

[6] *P. of M.*, i, p. 498, Fig. 356. The little jug of the same type with moulded barley ears (*op. cit.*, p. 414, Fig. 299 *a*) showing white dots on its dark ground is a characteristic fabric of M. M. III *a*.

FIG. 398. DEPOSIT OF BRONZE UTENSILS IN TOMB OF THE TRIPOD HEARTH, ZAFER PAPOURA CEMETERY.

were preserved, affording models for imitation to a much greater extent than in the case of pottery. Side by side with this conservative tendency there was, however, so far as all practical matters are concerned, a very living metallurgic industry at Knossos throughout L. M. II and the earlier part at least of L. M. III.

Bronze Utensils in 'Tomb of the Tripod Hearth'.

Group of bronze utensils in 'Tomb of Tripod Hearth'.

Good materials for comparison with some of the types presented by the above series of domestic hoards were afforded by a remarkable group of bronze utensils found in the 'Tomb of the Tripod Hearth' at Isopata.[1] These objects, which probably belonged to the last age of the Palace, are reproduced in Fig. 398.[2]

Early Minoan prototypes of later bronze vessels.

The upper part of the large bronze jug (*g*) is somewhat flatter than those of the present group of house deposits. What a very ancient history, however, this flattening and angular conformation of the shoulders has on Cretan soil appears from the occurrence of the same features on a form of clay ewer of the characteristic 'mottled ware' found in an early deposit at Sphoungaras, of well-ascertained E. M. II date[3] (Fig. 399, *b*). This vessel was clearly copied from a metal model, and even preserves a record of the studs of the rivets that fastened together its separate hammered-out plates. The spout itself, with the handle springing from it, may in the same way be compared with that of the *oenochoê* (Fig. 398, *l*). The pedestalled cup, on the other hand (Fig. 399, *c*), supplies the prototype of the more elegant 'champagne glass' shape (Fig. 398, *n*), and the plain cup, *a*—an imitation of a common early dynastic Egyptian copper cup[4]—may well stand in the same ancestral relation to the bronze specimen (Fig. 398, *m*)

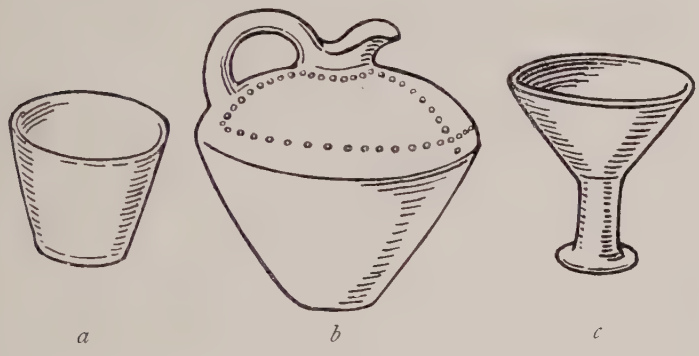


Fig. 399. E. M. II Vessels in 'Mottled Ware' copied from Copper Types: Sphoungaras.

[1] A. E., *Prehistoric Tombs of Knossos*, i (*Archaeologia*, lix, and Quaritch, 1906), p. 34 seqq.

[2] *Op. cit.*, Pl. LXXXIX.

[3] Fig. 399 is reproduced from *P. of M.*, i, p. 79, Fig. 47 (see, too, p. 80). The examples are from Miss Edith Hall, *Excavations in Eastern Crete, Sphoungaras*, p. 47, Fig. 21.

[4] See *P. of M.*, i, p. 80 and Fig. 48, *b*.

Thus it will be seen that more than one vessel of this L. M. II sepulchral group from Knossos retains characteristics of forms that were already executed by Minoan coppersmiths over a thousand years before their date.

FIG. 400. BRONZE EWER FROM 'CHIEFTAIN'S GRAVE'.

Another variety of the M. M. III–L. M. I *a* type of bronze jug (Fig. 398, *g*) occurred in the more or less contemporary 'Chieftain's Grave', the handles of which were decorated with scallop shells[1] (Fig. 400). The basin (*b*) of the large deposit, though rather shallow, is of practically the same form as those of the household group illustrated in Fig. 395. Only the reticulated pattern round the margin (cf. Fig. 401, below)—of mechanical execution, recalling turner's work—is new, and very far removed in spirit from the artistic

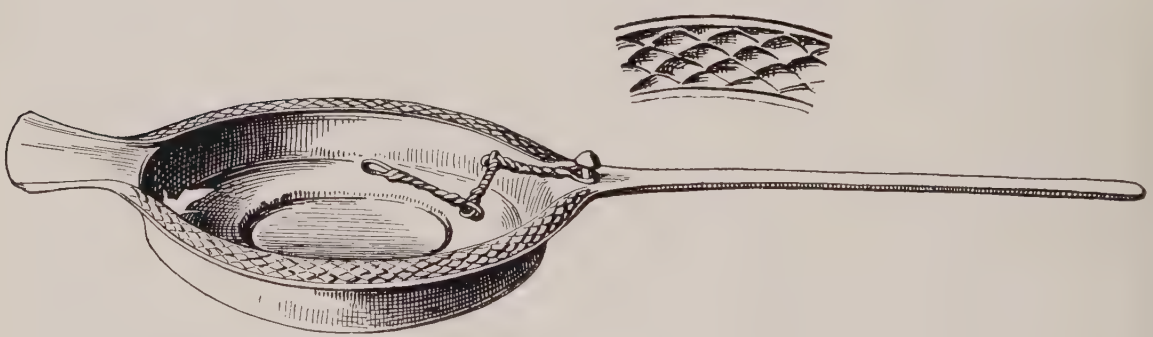


FIG. 401. BRONZE LAMP WITH CHAIN OF TRIMMER: 'TOMB OF TRIPOD HEARTH'.

Types of vessel found in L. M. II *b* sepulchral group.

decoration similarly applied to bronze basins in the case of the palatial hoard described below. This mechanically produced pattern also recurs on the ewer (Fig. 398, *l*) and on the borders of the bronze lamp (Fig. 401) which itself shows great practical excellence in its details. Its long handle with tapering end is well adapted for insertion into the chink of a wall, and a chain attached to a knob at the base of this, consisting of three long links ending in a loop, was evidently devised to hang from it a trimmer for the wick. It will be seen from Fig. 398, *c*, *d*, and *e* that they are provided with short knobbed

[1] *Prehistoric Tombs of Knossos*, i, pp. 53, 54, Figs. 52, 54.

spurs very useful for the winding round of a rag or cord in order to grasp the handle when the vessel was hot. This form of attachment was very common in the latest Minoan phase.

The tripod-cauldron (Fig. 398, *f*) is more organically developed as regards the attachment of the legs, which spring gracefully out of its sides, and its bottom is more capacious. As a whole, it is somewhat farther on the way to the Greek tripod-*lebes*.

The Palatial Deposit of Bronze Vessels in the North-West Treasure House.

The above account of the series of domestic bronze hoards from adjacent town-houses serves as a useful preface to the splendid find made, as already mentioned,[1] in the 'North-West Treasure House' which there is every reason to connect with a Palace sanctuary.

Palatial hoard of bronze vessels in N.W. Treasure House.

The discovery there of a group of vessels of truly palatial fabric was all the more important since, owing to the careful search for portable treasure at the time of the final catastrophe and later, no large metal objects had been found within the Palace walls. The bronze vessels lay about a metre beneath the surface, higher, that is, by the same distance, than the usual Late Minoan floor-level of the building. They were contained in one of a group of small walled spaces, itself not more than 2 metres by $1\frac{1}{2}$ in dimensions. Here some loose earth fell away in the course of the excavation and disclosed what at first sight appeared to be a set of bronze cups on their sides, ranged one above the other. On further clearing, however, it turned out that the supposed cups were the handles of a pile of four large bronze basins, while, in an upright position beside them, stood a fine single-handed ewer, or *oenochoê*, of the same metal (see Fig. 402, left, and Figs. 410, 411 *a*).

The carbonized woodwork found with them may show that there had been some kind of chest in the walled cavity in which they lay. Fig. 402 shows part of the hoard, the bronze ewer, two of the basins, and one handle in the state in which they were brought out, the ewer a good deal crushed.

The large basins.

The magnificent basin which occupies the background of this group[2] to the right is the largest of the series, 39 centimetres in diameter. Its rim is hammered over outwards, the exterior margin being fashioned to represent the rounded end of leaves, and above this is attached, by means of soldering or welding, an upper rim with a beaded and foliated ornament chased in high relief. The handle, fastened on by four rivets, shows a beaded

[1] See above, pp. 621, 622.

[2] See, too, Fig. 407, *d*.

FIG. 402. EWER, BASINS, AND HANDLE FROM PALATIAL BRONZE HOARD, AS FOUND.

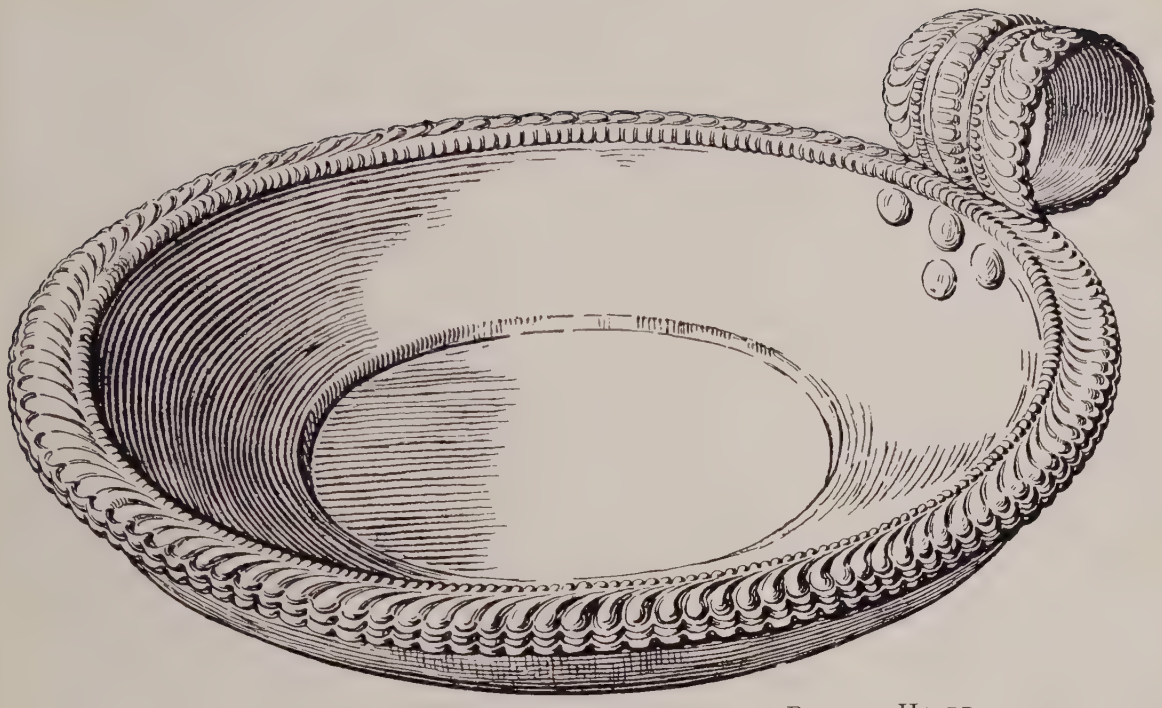


Fig. 403. Bowl with Foliate Decoration, from Palatial Hoard.

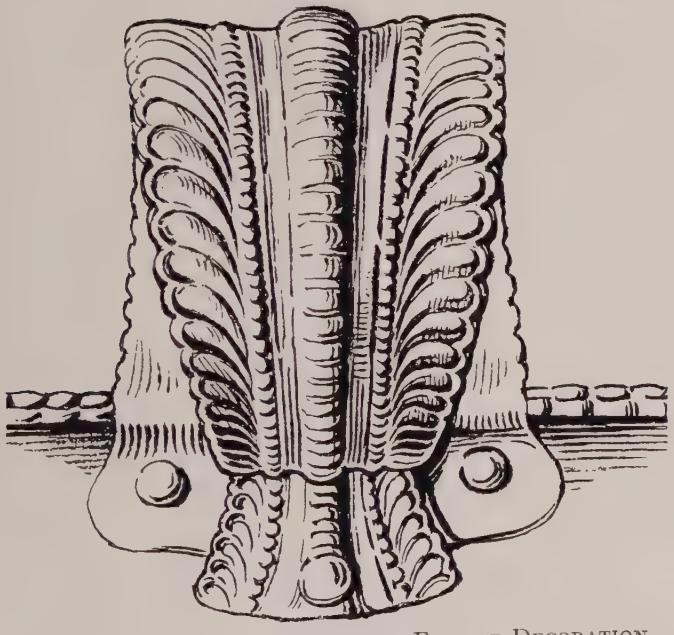


Fig. 404. Handle of Bowl with Foliate Decoration.

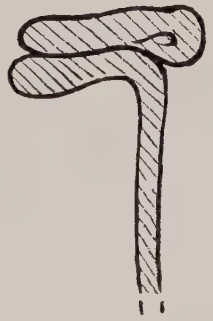


Fig. 405. Section of Rim.

stem from which on either side ramifies the same embossed leaf ornament (see Fig. 404). An exquisite decorative feature is the double repetition of the outer edges of the leaves round the rim of the vessel, so that the whole margin presents the appearance of three superposed bands of foliage. The section, Fig. 405, shows the way in which it is folded over.

Ceramic copies of foliate edges in L. M. II.

This repetition—sometimes greatly multiplied—of the foliate edges was taken over on to the painted decoration of a series of clay vases belonging to the later 'Palace Style' of Knossos, which thus betray their indebtedness to the chased work of this earlier metal class. Good examples of this are supplied by a 'Stirrup Vase' from a Shaft Grave (No. 68) at Zafer Papoura[1] (Fig. 406), and by the upper part and shoulders of a fine amphora with 'papyrus' designs from the Royal Tomb at Isopata.[2] This reaction on ceramic form and decoration shows the important part played by metal vases in the great days of the later Palace, and affords a parallel to the evidence supplied by the 'egg-shell' ware, with its fine metallic lustre and repoussé ornament, as to the wealth of the early Palace in vessels, not of bronze alone, but of silver and gold. In the case of the bronze types we may suppose that the practice, otherwise exemplified, of coating them with a thin gold foil, as was done with the black

FIG. 406. STIRRUP VASE SHOWING MULTIPLICATION OF FOLIATE BORDER, L. M. II SHAFT GRAVE (No. 68), ZAFER PAPOURA.

[1] *Prehistoric Tombs of Knossos*, i, p. 74, Fig. 83, and pp. 121–3 with Fig. 115. Among other metal characteristics of this vase may be noted a knob, derived from the head of a stud, on the side of the spout, and the small 8-shaped shields seen in relief on the upper surface, recalling those applied as rivet-heads on the silver 'rhyton' from the Fourth Shaft Grave at Mycenae. It is only from the reflection of metal technique on this vase that we know that metal stirrup vases existed at Knossos.

[2] *Op. cit.*, Pl. CI.

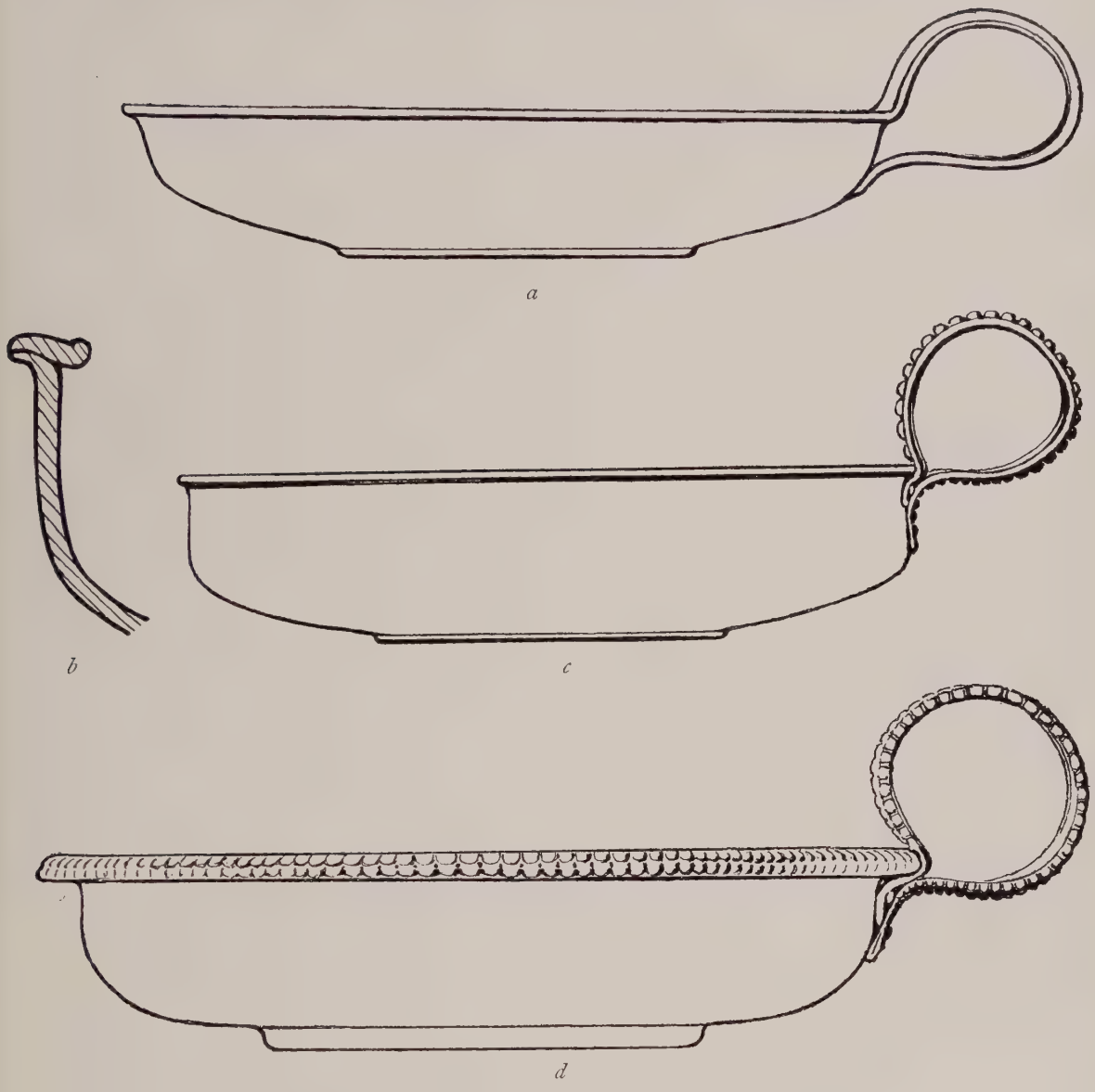


FIG. 407. PROFILE VIEW OF BRONZE BASINS FROM PALATIAL TREASURY.

steatite 'rhytons', was also resorted to on occasion. At times, too, a repoussé plate of precious metal was attached to the rim.[1]

[1] An example of this practice is to be seen in a miniature silver bowl of the same form as the above found in the Vapheio Tomb where the handle and border are overlaid with gold plate presenting a characteristic 'whorl shell' motive. The silver bowl from the Fifth Shaft Grave at Mycenae, referred to below, with its repoussé gold handle and gold-plated rim also affords a good instance.

Foliate bands on vessels.

The circling of vases with a foliate band goes back to the early days of Middle Minoan polychromy.[1] The flower spikes sometimes accompanying the painted foliage show that it was in these cases intended to depict olive sprays. By the close of M. M. II, however, we also see circlets of round-ended leaves like the metal type before us.[2]

A good parallel to the decoration of the present basin is to be found in a silver bowl from the Fifth Shaft Grave at Mycenae[3] with a rim and handle of gold plate adorned with repoussé foliage of the same kind, but of inferior execution and without the beautiful reduplication of the leafy border here seen. It is to be observed that the associations of the sepulchral group, to which this silver bowl belonged, lie rather with M. M. III than L. M. I.

The smaller basin seen in Fig. 402, and of which the profile view is given in Fig. 407, *a*, shows no ornament either on rim or handle. A broader facing was, however, welded on to its originally narrow border (Fig. 407, *b*). The handle here is in one piece with the superimposed rim.

Basin with 'sacral ivy' pattern.

In the case of another larger basin, 33 centimetres in width, the handle is also in one piece with a rim, welded on to the edge of the receptacle in the same way, and in this case both rim and handle present a fine design of the 'sacral ivy' in chased relief. This had been a good deal worn and oxidized on the rim and the upper part of the handle, and is best seen on the lower part of the handle, as shown in Fig. 408. The traces of the curved ends of the papyrus spray are here visible within the lower part of the ivy-like leaves.

FIG. 408. HANDLE OF BOWL SHOWING 'SACRAL IVY' MOTIVE.

The wear visible on the handle and rim of this vessel proves that it had been a considerable time in use. On the other hand, the design itself, as taken over into metal-work, is very characteristic of the Third Middle

[1] E. g., *P. of M.*, i, p. 184, Fig. 133, *e* (conventionalized band of foliage in the inside of pedestalled bowl: M. M. I). In Fig. 194, *g* (p. 262), olive sprays are clearly shown. The foliate bands are also interrelated with the 'flower-chain' pattern (see *op. cit.*, p. 270, Fig. 200).

[2] *Op. cit.*, p. 255, Fig. 191, left.

[3] Schliemann, *Mycenae*, pp. 319, 320, and Figs. 482, 483

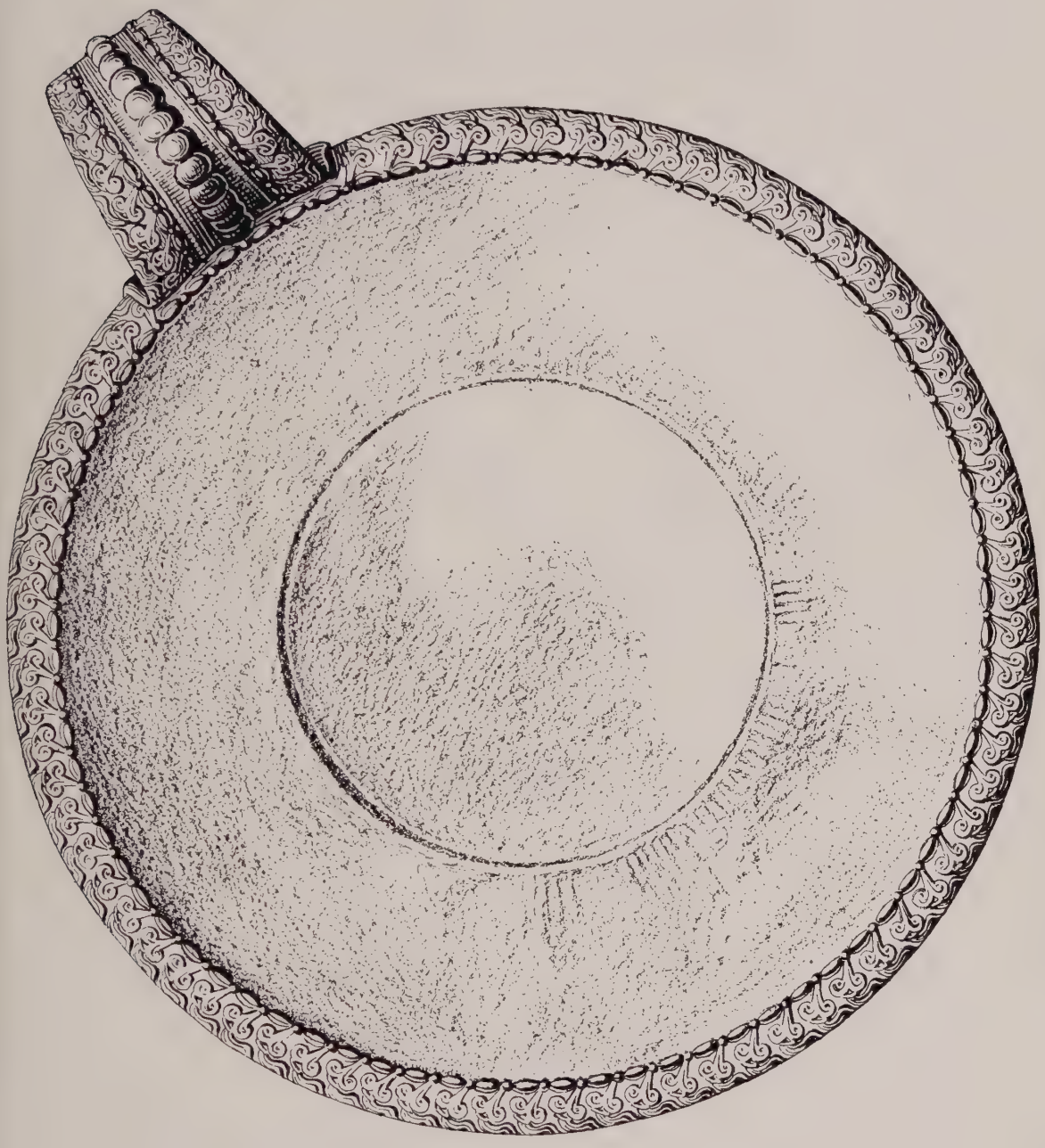


FIG. 409 A. BRONZE BASIN WITH TUFTED *WAZ*-LILIES FROM PALATIAL TREASURY.

Minoan Period. Comparative examples of that date are given on p. 481, Fig. 288, above.

Of still greater charm and originality is the design on the remaining

Basin with tufted *waz*-lilies and beading.

basin[1] (Fig. 409 A), which, as we shall see, has also a well-marked religious association. It consisted, as will be further shown by the section of the rim illustrated below in Fig. 507, of an inner border of finely relieved beading, from which, at a slightly oblique angle—like pendants in relation to a necklace—spring conventional lilies, terminating in tufts, that stream behind them like the flames of so many torches, and thus give the suggestion of a continuous outer border following the curve of the inner beading. The balance and graceful distribution of detail in this design, controlled by unity in composition, are admirable, and, indeed, show an innate genius for decorative art. The elaborate composition of the border chain is set off, moreover, by the bold and simple line of larger beading that forms the central feature of the handle, and is carefully graduated to its tapering width. A profile view of the basin is given in Fig. 407, *c*.

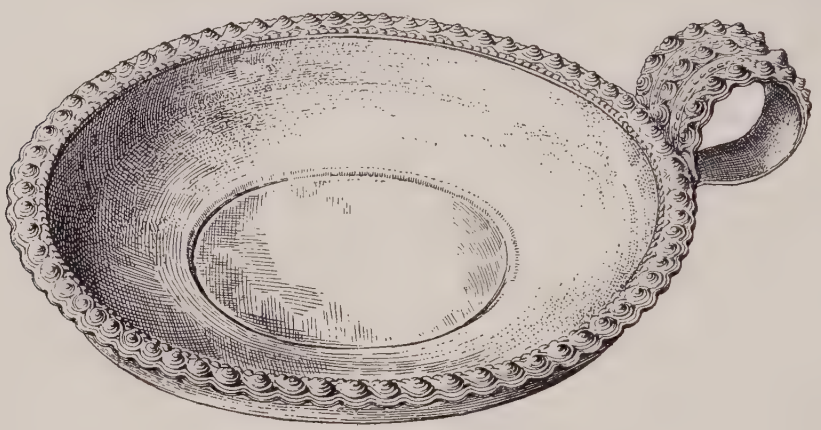


FIG. 409 B. BRONZE BASIN FROM HOUSE AT MOCHLOS (see p. 624, above).

Compared with jewellery of Priest-King relief.

It will be seen that this exquisite pattern is taken over from jewellery, the conventionalized *waz*-lilies, indeed, being among the most frequent of Minoan gold pendants. In the collar of the painted relief fresco of the 'Priest-King' illustrated below,[2] similar fleurs-de-lis are linked as in the present case to globular beads. They reappear as the principal feature of the crown itself, and the triple plumes springing from its central *waz*-lily present a close analogy with the flamboyant sprays that flow from the lilies that surround the border of this bronze basin.[3]

In every detail of its design the vessel before us would seem to have been specially devised for use in the Palace Chapel of such a Priest-King—

[1] This was within a centimetre of the same size as the foregoing: 32 as against 33 cm. The handle was in this case a separate piece of metal, riveted on as in Fig. 404.

[2] See Frontispiece and cf. p. 776, Fig. 504 B.

[3] This *waz*-lily pattern in combination with the Priest-King's Crown, as representing a true Minoan unity in decorative design, was chosen by me for the cover of this book.

of the kind, indeed, that seems actually to have existed in close connexion with the painted relief. 'The North-West Treasure House' in which it was found, in company with the rest of this truly royal service, may be reasonably regarded as a reserve depot for one or more sanctuaries within the Palace. As a worthy comparison to these palatial basins one from a house at Mochlos is here reproduced in Fig. 409 B.

The bronze ewer.

The bronze ewer is also an elaborate and magnificent piece of work. It was found in a somewhat crushed condition, but its original contour is shown in the restored drawings (Figs. 410, 411, *a*). It is 34·5 centimetres in height and 27 in diameter. The body is formed of two strips of metal joined by a double row of rivets; a very prominent collar masks the junction of the neck, and the upper part of the handle is attached by three larger stud-headed rivets. The alternating curves or 'eyes' that surround the upper part of the body are the most noticeable feature, and the ribbed decoration of the interior of the upper zone of these suggests comparison with the similar relief in the case of the tongue-like centres of the half-rosettes illustrated by the frieze of the neighbouring shrine (Fig. 370, p. 594). The alternating curves seen in this repoussé bronze work are reflected on a pattern that appears on painted vases in the latter part of the First Late Minoan Period (L. M. I *b*).[1]

FIG. 410. BRONZE EWER FROM PALATIAL TREASURE SEEN FROM ABOVE.

Parallel with gold-plated silver jug

Of great interest is the parallelism presented between this vase and the silver ewer, partly also formed of bronze, plated with gold, the remains

[1] An example of this decorative motive is seen on the lower part of a vessel from a house excavated by Dr. Hogarth at Knossos in 1900 (*B. S. A.*, vi, p. 76, Fig. 21). It alternates there with zones imitated from the foliated reliefs.

a *b*

FIG. 411. *a*, BRONZE EWER FROM PALATIAL TREASURY, KNOSSOS; *b*, SILVER AND GOLD-PLATED EWER FROM FIFTH SHAFT GRAVE, MYCENAE.

of which occurred in the Fifth Shaft Grave at Mycenae.[1] This tomb also contained the gold-plated silver bowl, the foliated decoration of which bears such a close resemblance to that of the bronze basin (Fig. 403). A restored drawing of the plated bronze jug, executed for me by Monsieur E. Gilliéron, fils, is here given for comparison. Not only do we find the same large rolled collar round the neck, and the lesser, beaded fluting round the shoulders, but the characteristic curved decoration with the knobs below also finds a near parallel. Only in the case of the Mycenae specimen the ribbing extends to the lower part of the vase. The centre of gravity of the relics found in the Fifth Tomb at Mycenae may be said to lie within the borders of the Third Middle Minoan Period, though it contained one painted jug of L. M. I *a* type. of Fifth Shaft Grave.

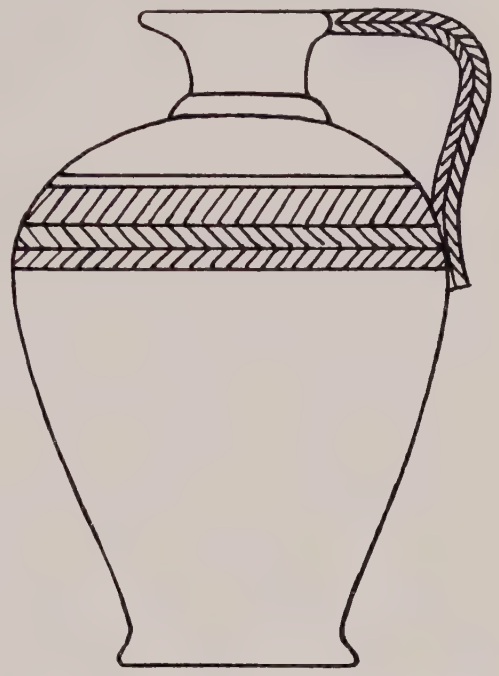


Fig. 412. Ewer plated with Gold and Silver: Tomb of Senmut.

Three of the bronze basins described above seem also rather to belong to this later chronological stage. On the whole, however, we must regard this hoard to which they belonged as partly, at least, of M. M. III *b* date, though its actual interment was the result of a catastrophe that took place in the earlier phase of L. M. I.

Comparisons with Ewer of Senmut's Tomb.

In form and characteristic features both the bronze ewer from this deposit and the silver and gold-plated example from the Fifth Shaft Grave, as now restored, offer very interesting points of comparison with that borne on his shoulders by one of the envoys from Keftiu-land in a wall-painting of Senmut, the Vizier of the Great Queen Hatshepsut[2] (Fig. 412). We Comparisons with ewer of Senmut's Tomb.

[1] An incomplete representation of the upper and lower portions of this, bearing out the characteristic motive of the decoration, is given by Schliemann, *Mycenae*, pp. 316, 317, Fig. 478, but there is no suggestion of a handle. The mouth had been overlaid with bronze ('copper') plated with gold. The bottom was entirely of bronze ('copper'), no doubt, as Schliemann suggests, also plated with gold.

[2] This comparison, so far as concerns the Knossian ewer, was made by me at the time of the discovery (*B. S. A.*, ix, 1903, p. 128). The

recognize the same prominent collar, a characteristic feature of the M. M. III phase, the sub-angular handle, and the division of the body into an upper and lower plate. The upper zone is white, indicating silver, while the yellow hue of the lower part stands for gold, probably, as in the case of the Mycenae jug, plated copper or bronze. Unlike the Mycenae specimen, however, the painted ewer shows the gold effect extending over more than half of the body. The 'herring-bone' band that runs round the lower margin of the upper plate and is seen on the edge of the handle also deserves attention, since it seems to be a likely linearization of the foliate bands such as those of the bronze basin.

Date and activities of Senmut.

The Tomb of Senmut,[1] as shown below, may date back a decade or more before the beginning of the fifteenth century B. C. According to the chronological system here adopted, the vessels borne by the Cretan envoys, as seen on the walls of his tomb, would therefore belong to the closing phase of the earlier division (*a*) of the First Late Minoan Period. The Vapheio Cup type, so carefully delineated in the case of two other vessels of offering on the walls of this tomb, was still much in vogue at that date.[2]

L. M. I *a* vase type of Senmut's Tomb.

The 'pithoid jar' of bronze or copper borne by another of the Minoan envoys of the Senmut group, in the same manner as the ewer, and referred to above,[3] in connexion with a Knossian form, may also be preferably assigned to the earlier rather than the later phase of L. M. I.

Minoan figurine of galloping bull in Tomb of User-amon.

The Tomb of User-amon, already mentioned in connexion with the 'rhytons' in the shape of bull's and lion's heads, and itself only slightly later in date than that of Senmut, has now supplied another valuable record of the great transitional M. M. III–L. M. I stage of Minoan toreutic Art. Among the processional figures there, bearing gifts to Pharaoh's Vice-gerent, showing an attempt of the Egyptian artist to copy the typical Minoan attire[4]—after a youth bearing a bull's head 'rhyton', and another with a one-handled ewer—appears a third, distinguished by a horn-like lock above his forehead, carrying a tray on which is seen a small figure of a galloping bull (Fig. 413, *a*). In the somewhat later tomb of Men-kheper'ra-senb another 'tributary'

outline of the lower part of the Senmut vessel had been destroyed by some marauder in the endeavour to cut out the whole design. It has been happily preserved, however, in a drawing of the whole group made about 1837 by R. Hay and published by Dr. R. H. Hall, *B. S. A.*, xvi, Pl. XIV. Coloured copies of the wall-painting as it exists have been published by Prisse d'Avennes and by W. Max Müller, *Egyptological Researches* (1906), Plates 6, 7, from original photographs and drawings.

[1] See below, p. 737.

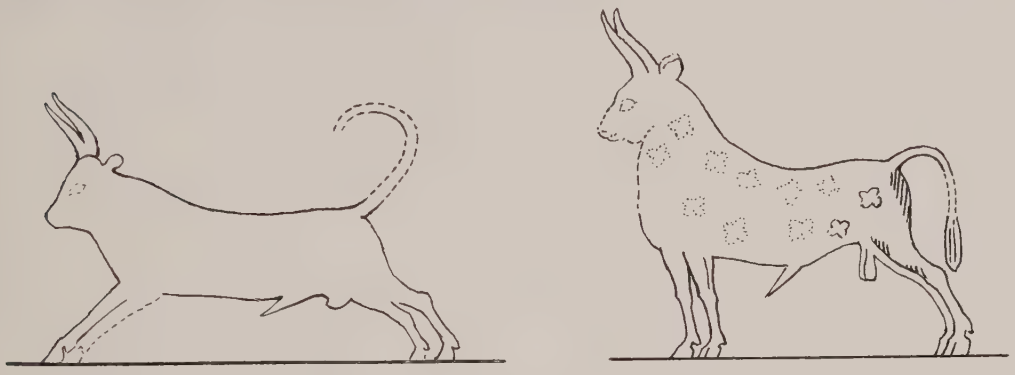
[2] The stone example, p. 380, Fig. 212, for instance, was found amongst a mass of L. M. I *a* pottery.

[3] See above, pp. 425, 426 and Fig. 247.

[4] See below, p. 738 and Fig. 471.

from Keftiu bears a standing figure of a silver bull with cruciform spots, apparently inlaid with niello (Fig. 413, *b*).[1]

In the first example we have, beyond doubt, an Egyptian rendering of the animal as seen coursing at the 'flying gallop', to which attention has been called in the First Volume of this work[2] as a favourite feature of Minoan Art, and which seems, in fact, to have been taken over into that of Egypt from this Cretan source. A bull, indeed, pursued by a lion, both at a headlong gallop



a *b*

FIG. 413. *a*, SILVER FIGURE OF GALLOPING BULL BORNE BY 'TRIBUTARY' OF KEFTIU IN TOMB OF USER-AMON; *b*, SILVER FIGURE OF STANDING BULL INLAID WITH CRUCIFORM SPOTS IN TOMB OF MEN-KHEPER'RA-SENB (SLIGHTLY COMPLETED).

of this kind, appears in a purely Minoan setting, with rocks descending from above, on the inlaid dagger-blade of Queen Aah-hotep I,[3] dating from the close of the Seventeenth Dynasty (1610–1597 B. C.) and well within the borders of the Third Middle Minoan Period. In Crete itself the motive already appears in M. M. II.[4] A sacral type.

But, in the case of a Minoan *objet d'art*, a bull at this full gallop was of a particular religious import in connexion with the sports of the bull-ring in honour of the Goddess. Her temple, indeed, takes its place between the grand stands,[5] the wooden pillars of which, with their curiously constructed imposts, are also seen on either side of such scenes in the reliefs of the steatite libation vessels. That the idea of consecration attached itself to the animal thus represented may be gathered from the offertory heifers borne by

[1] See Suppl. Pl. XXVIII and p. 746, Fig. 482, below.

[2] *P. of M.*, i, p. 713 seqq. For a comprehensive study of the '*galop volant*', see S. Reinach, *La représentation du galop dans l'art ancien et moderne* (*Rev. Arch.*, 1900–1), who first called attention to the importance of this feature.

[3] *P. of M.*, i, p. 715, Fig. 537.

[4] See *op. cit.*, p. 718. It was already taken over into Hyksos Egypt, as is shown by its appearance on the gold-plated dagger-hilt of King Neb-Khepesh Ra (*op. cit.*, p. 717, Fig. 540).

[5] See above, p. 597, Fig. 371.

men, clad in the skins of sacrifice, towards the sepulchral shrine on the painted sarcophagus of Hagia Triada, which are there symbolically depicted as in full gallop (Fig. 414).[1] It will be seen that it forms essentially part of the same design as the well-known acrobatic scene of the Tiryns wall-painting (Fig. 415).

FIG. 414. OFFERTORY FIGURE OF GALLOPING HEIFER ON HAGIA TRIADA SARCOPHAGUS.

Cretan bronze group of galloping bull and acrobat.

A remarkable bronze figurine recently found in Crete shows in fact a small group, executed by a Minoan artist, in which the galloping bull was accompanied by a turning performer taken from the sacred sports (Fig. 416).[2] The youth, who here turns a back somersault, seems to have just released his hold of the animal's horns: his arms are stumped off, and the attachment is made by means of the long tresses of his hair. His feet rest on the bull's back. The whole is an instantaneous rendering, only comparable with the ivory figurine of the Minoan 'Cowboy' springing through the air, found in the Domestic Quarter of the Palace.[3] It is, in fact, a *tour de force*, unique

FIG. 415. GALLOPING BULL AND ACROBATIC FIGURE ON TIRYNS FRESCO.

[1] R. Paribeni, *Il sarcophago dipinto di Hagia Triada* (*Mon. Ant.*, 1908, Pl. I, and p. 28, Fig. 7). The foremost of the two figures where the animal is incompletely preserved is shown in *P. of M.*, i, p. 439, Fig. 316. Dr. Paribeni remarks 'evidentemente il pittore non ha saputo staccarsi di quel tipo di toro galoppante che segna veramente una delle più belle conquiste dell' arte minoica'. But it was, surely, the religious rather than the purely artistic side of this representation that led to its adoption in this offertory scene. See my remarks, *J. H. S.*, xli, p. 250.

[2] Now in the collection of Major E. V. Spencer Churchill, who kindly allowed me to describe it in *J. H. S.*, xli (1921), p. 247 seqq. Nothing more is known about the provenance of the object beyond the fact that it was found in Crete.

[3] A. E., *Knossos, Report*, 1902, Pl. II and p. 72 seqq. To be illustrated in the third Volume of this work.

among the specimens of Minoan metallurgic art, and showing the highest proficiency in the technique of bronze casting. It belongs to the acme of Minoan art.

Figurine of stationary

On the character of the sport itself more will be said in a succeeding Section. Votive figurines in the shape of bronze bulls in a more or less

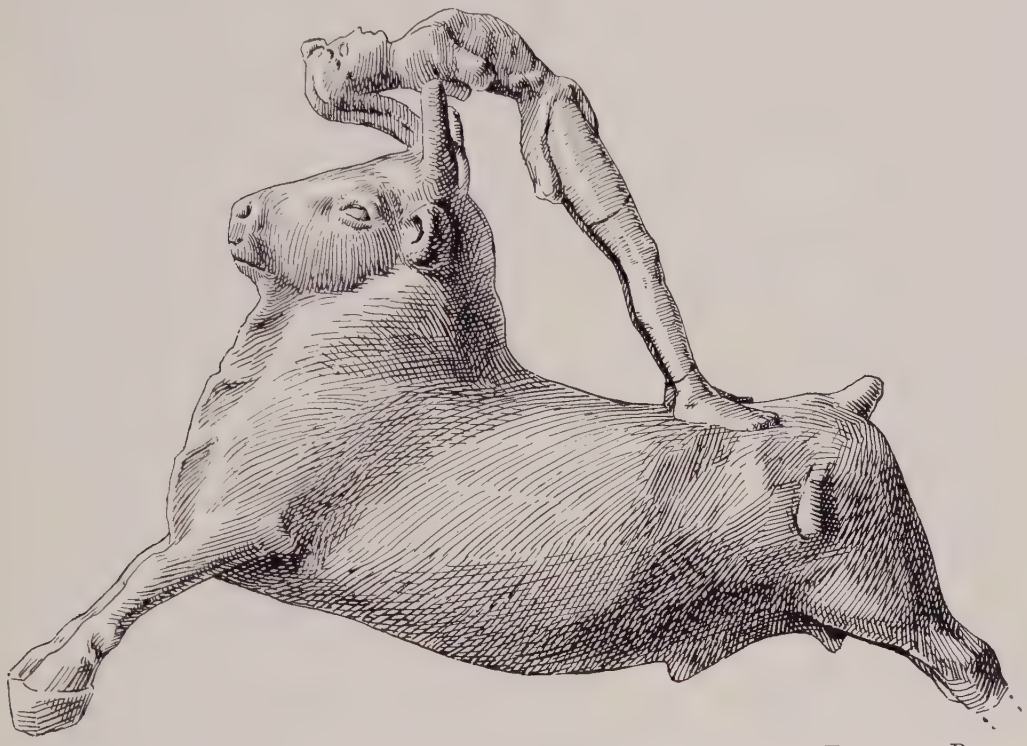


Fig. 416. Minoan Bronze Figurine from Crete showing Acrobatic Figure on Bull.

bull depicted in Tomb of Men-kheper ʿra-senb.

stationary position abound in Cretan cave sanctuaries such as that of Psychro, sometimes showing a certain extension of the fore and hind legs that may be due to the suggestion of the galloping type. This standing attitude is itself reproduced by a small figure of a bull, Fig. 413, *b*, above, on a basket-work tray among the Minoan tributary gifts depicted on the walls of the Tomb of Men-kheperʿra-senb, Inspector of the Treasure Houses of Thothmes III and High Priest of Amon, who, as the son of Rekhmara, was later in date than User-amon or Senmut.

M. M. III prototypes of tributary gifts from Keftiu.

The acrobatic bronze group (Fig. 416), which illustrates the highest development of Cretan glyptic art, may best be referred to the closing Middle Minoan phase, and the parallel figure depicted among the offertory vessels in the User-amon Tomb clearly derives from the same cycle.

Minoan 'hydrias' from Cyprus.

It has already been pointed out that many of the tributary vessels illustrated in these sepulchral scenes, even those of later tombs of the Theban group, such as that of Rekhmara and Menkheper'ra-senb, really go back to prototypes of the great transitional age, such as the bronzes found in the North-West Treasure House.

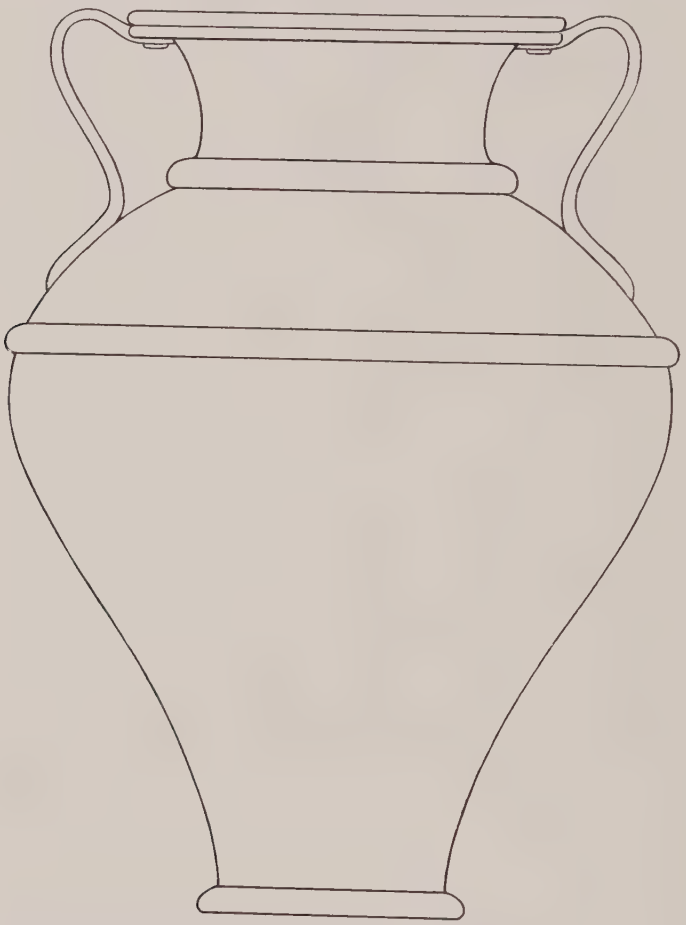


Fig. 417. Bronze 'Hydria' of L. M. I Fabric from Cyprus.

Of great importance in relation to the 'tributary' offerings from Keftiu are the two exceptionally large bronze 'hydrias' from Cyprus, both exhibiting reliefs that point to a religious destination, and clearly of Minoan fabric.

The first of these[1] shows at the base of each handle three bull's heads facing — each contained in a looped oval, like a handled pan. Above are three pairs of confronted Minoan Genii holding high-handled ewers, and round the rim is a continuous circle of bulls at full gallop, pursued by lions.

Marine relief on Kurion 'hydria': L. M. I *a*.

The second 'hydria' (Fig. 417) from Kurion,[2] and evidently a fellow piece to the other, has been already referred to in connexion with the marine designs at the base of each handle, which, from their fine free character, fit on to the masterpieces of this style, and can hardly be brought down later than the close of the First Late Minoan Period. The upper part of the

[1] See Perrot et Chipiez, *L'art dans l'antiquité*, iii, pp. 794–6, and Figs. 555, 556; J. L. Myres, *Cesnola Collection*, pp. 478–9, No. 4703 (cf. p. 305, above, n. 1).

[2] See M. Markides, *B. S. A.*, xviii, pp. 94–7, and Pl. VIII. In the Cyprus Museum.

handles shows four confronted pairs of Minoan Genii in relief, their fore-legs raised in adoration while, separating them in continuous length, is a curious object with a warty surface which might, indeed, be taken to be a succession of toads. This was probably suggested by the crocodile that sometimes accompanies the prototype of these Genii, namely, the Egyptian Goddess Reret (Fig. 418). The ewers with high spouts and handles repeated on the rim (Fig. 419) are taken over from those held between the fore-paws of the Genii on the fellow vessel. They represent a form of libation vessel constantly seen in the hands of these beneficent Minoan demons, as on the Vapheio gem, where they are seen watering nurseling palms with ewers of the same kind.[1]

Reliefs of Minoan Genii and libation vases.

FIG. 418. HANDLE OF BRONZE 'HYDRIA' SHOWING MINOAN GENII AND MARINE PIECE.

This noble 'hydria'—the interior width of the mouth of which is 13 inches (33·3 cm.) with a rim $1\frac{3}{8}$ in. (4·5 cm.) broad—would have stood about three-quarters of a metre high. Taken in connexion with the other similar vessel, the reliefs on which are in an equally fine style, it can hardly, as has already been observed, be brought down to a date later than that of the mature L. M. I *a* style—not later, that is, than the last decades of the XVIth century B. C. The pronounced rolls round neck and shoulders recall indeed Figs.

[1] See A. E., *Myc. Tree and Pillar Cult*, p. 3, Fig. 1, and cf. p. 19, Figs. 12, 13, and 14, where the Genii are seen pouring libations over cairns and altars and into tripod cauldrons.

411, *a* and *b*. This points therefore to an intimacy of contact between Cyprus and Crete at a decidedly earlier epoch than has been hitherto allowed for.[1]

Direct Minoan relations now established with Cyprus and Syria.

Was there already some Minoan colonial plantation or at least a 'factory' on the Coast of Cyprus? May not such have also existed on the opposite Cilician shores? The direct evidence afforded by the bronze 'hydria' is only one of a series of indications pointing the same way.

In earlier Sections of this work sufficient proofs have been advanced of direct overseas communications with the Nile Valley, going back to a very remote period. The contents of the primitive *tholi* of Messarà, and of the earliest strata of Knossos itself, the discovery of the Minoan Port of Komò on the shores of the Libyan Sea, and of the vestiges of a Minoan paved way across the Island, bringing this Southern haven into connexion with Knossos—the proto-Libyan influences noted in customs and costume, all these are speaking facts that can hardly be gainsaid. But, if the earliest stream of civilized foreign influence flowed mainly from the Egyptian side, it is none the less true that from the very beginning of the Middle Minoan Age and the Age of the Cretan Palaces the traces of direct relations with the Easternmost Mediterranean Coast become more and more evident. The occurrence of Babylonian cylinders of Hammurabi's time, the imitation of inlaid stone 'rhytons' in the form of whole bulls, of remote Sumerian descent, the use of clay tablets as a vehicle for writing, and characteristic features in the structure of the Palaces themselves—these are only a few leading indications of this new current of influence from the East, which must be taken to include the farther coastlands of Southern Asia Minor.

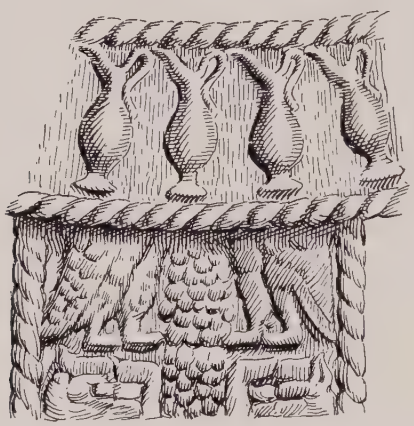


FIG. 419. PART OF RIM OF BRONZE 'HYDRIA': HANDLE VISIBLE BELOW.

Two silver vases recently discovered in a rock tomb at Byblos,[2]

[1] Markides (*op. cit.*, p. 97) writes: 'We are certainly not far wrong in dating this bronze to the fourteenth century B.C.' Myres, *Cesnola Catalogue*, *loc. cit.*), brings down the date of the companion vessel to 'about 1300–1200 B.C.' These conclusions must be radically revised.

[2] Ch. Virolleaud, *Découverte à Byblos d'un hypogée de la douzième dynastie Égyptienne* (*Syria*, iii, 1922, p. 273 seqq.), and E. Naville, *Le vase à parfum de Byblos* (*Syria*, iii, pp. 291–5); Ch. Clermont Gauneau, Note additionelle (*op. cit.*, pp. 295–7); E. Pottier, *Observations sur quelques objets trouvés dans le Sarcophage de Byblos* (*op. cit.*, pp. 298–306).

together with Egyptian perfume pots of obsidian, bearing the name of Amenemhat III on their gold mountings, have supplied a new link between Syria and Crete in the days of the Twelfth Dynasty. The bowl with repoussé spiral decoration[1] certainly shows Aegean inspiration (Fig. 420). A bronze type of *oenochoê*,[2] again, has a very Cretan aspect (Fig. 421), and is of substantially the same form as that associated with the Minoan Genii in Fig. 418. On the other hand, the spouted tea-pot-like ewer[3] found with it has an equal interest—not, indeed, as giving evidence of Cretan importation, but rather as supplying the prototype of a similar vessel of somewhat later date executed in the finest faïence of the Palace fabric and imitated from metal-work, which was derived from the Central Treasury at Knossos.[4]

Byblos find.

Silver bowl of Minoan type.

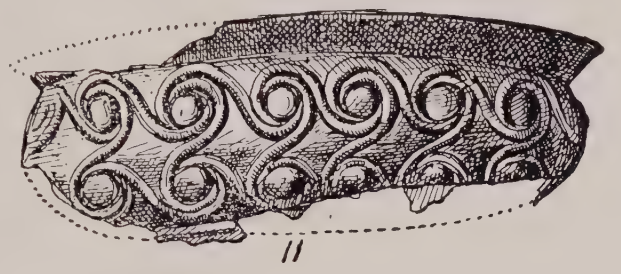


Fig. 420. Silver Bowl of Minoan Type from Byblos.

In view of the various evidences of trade relations between Crete and the Syrian Coasts, going far back into the Middle Minoan Age, there is no difficulty in supposing that Minoan merchants extended their voyages from one staple to another round the whole of the Easternmost Mediterranean Coast, and eventually entered the mouth of the Nile from that direction. In other words, it looks as if in this later Age the commercially profitable coasting route via Cyprus, Cilicia, and Syria largely superseded, or at any rate supplemented, the old direct lines of navigation to Egypt from the Southern ports of Crete.

It is a significant fact that the Theban tomb paintings which supply us with a contemporary record of tributaries, who in type, costume, and the gifts that they bear, are clearly Minoan, in all cases where the evidence is at all complete, associate them with emissaries of North Syrian peoples. On the walls of Men-kheper'ra-senb's tomb described below,[5] the Chief of

[1] Virolleaud, *op. cit.*, p. 285, Figs. 5, 10, Pl. LXIV, No. 11. Diam. 14·5 cm.

[2] *Op. cit.*, Pl. LXVI, No. 12. Height 33·35 cm.

[3] *Op. cit.*, p. 285, Figs. 5, 10 and Pl. LXIV, No. 10. See too, below, p. 825, Fig. 541, *a*.

[4] An illustration of this is given in Figs. 540, 541, *b*, pp. 824, 825 below. Monsieur Pottier (*op. cit.*, pp. 300–1) was led from the resemblance of the fabric of the *aiguière* with that of the basin to regard it as an 'Early Mycenaean' importation. But, though at the close of E. M. III and that of M. M. III *a* spouted pots are also found in Crete, their later and more permanent habitat was principally Northern Syria and Cappadocia.

[5] See below, p. 746 and Fig. 482.

Keftiu is accompanied in his mission by those of Kadesh, Gebal, Byblos, and Khatti or the land of the Hittites, though the gifts are mainly borne by Minoan youths. In Rekhmara's tomb Keftiu appears as a Western land after the Syrian Rutenu. In various documents the name is found after those of a series of Syrian coast towns. Often it is mentioned together with 'Asiy', generally identified with Cyprus, and it is coupled in a special way with Mannus (or Malnus) = Mallos on the Cilician Coast. On a very late inscription, indeed, which, however, is based on an earlier document,[1] Mallus appears as a silver-producing district of the Keftiu country.[2] The men of Mallus themselves are depicted with red, sunburnt skins like those of Keftiu,[3] and with the same long flowing hair—so characteristic of Minoan fashion. The connexion with Cilician Mallus, it may be observed, has a special importance from the fact that the elements of this name seem to enter into those of more than one Cretan town, including Mallia,[4] where the great Minoan Palace has now come to light. In relation to Knossos, indeed, this early Cilician connexion has a special interest from the recurrence of the personal name of Knôs in inscriptions near the Korykian Cave and Temple, in the territory of the Priest-Kings of Olba.[5] Ethnographically, moreover, in pre-Hellenic times, Cyprus was linked on to Cilicia.

Fig. 421. Bronze Oenochoê from Byblos.

On the other hand, in the Rekhmara inscription we read 'the Princes of Keftiu, of the Islands of the Sea'—preferably in apposition, but still pointing to a relationship. In the 'Hymn of Victory' of Thothmes III, moreover, the King boasts :

> I have come, causing thee to smite the Western land,
> Keftiu and Cyprus (*Ysy*) are in terror,

[1] Cf. W. Max Müller, *Asien und Europa*, p. 337 seqq.

[2] *Op. cit.*, pp. 344–5, and p. 341, n. 1.

[3] In the illustrated Table of Peoples, *L. D.* 63; cf. W. Max Müller, *op. cit.*, p. 340. Mannus is here coupled with Keftiu.

[4] In South-Eastern Crete there is also a village called Mallæs or Malæs (Μάλλαις or Μάλαις).

[5] E. L. Hicks, *Inscriptions from Western Cilicia* (*J. H. S.*, xii), pp. 230–1, 254–5. Cf. *P. of M.*, i, p. 6, and n. 2.

I have caused them to see thy majesty as a young buck,
Firm of heart, ready horned, irresistible,

and, after a short diversion concerning Mitanni, continues:

I have come, causing thee to smite those who are in the Isles:
Those who are in the midst of the Great Green (Sea), hear thy roarings.[1]

Ships of 'Keftiu' (Crete) on Phoenician Coast.

In a passage of Thothmes III's Annals, of the year 34, ships of Keftiu, 'laden with poles', are mentioned in a port of the later Phoenician Coast,[2] together with Syrian ships. The timber may well have been from the Lebanon forests; the bronze or copper ingots borne by the envoys of Keftiu were unquestionably derived from Cyprus, and their silver bullion from Cilician mines. In view of all the facts, we are, indeed, justified in concluding that the carrying trade between these regions, as well as the North Syrian ports and the Mouths of the Nile, was at this time largely in Minoan hands.

Whether, as may well have been the case, the Cretan merchants possessed staples of their own on the Cypriot coast, or in the havens of the opposite littoral of Asia Minor, it is to be presumed that the artistic works in various metals that they also bore to Egypt were executed in the *ateliers* of the Minoan home-lands on the Aegean side.

It may be a moot point whether or not the Minoans had some kind of commercial settlement in the neighbourhood of Mallos or elsewhere on the Cilician Coast, to which in a narrower geographical sense the name of Keftiu should apply. But the attempt to regard the Keftiu people of the Egyptian wall-paintings and records as primarily of Cilician stock[3] will hardly now

[1] Breasted, *Ancient Records of Egypt*, ii, p. 264, No. 659, and p. 265, No. 660.

[2] W. Max Müller, *Asien und Europa*, p. 339, and cf. p. 189. Zahi, along the coastland of which Thothmes passed, is equivalent to the later Phoenicia. Among ships similarly laden were those of 'Kupnï', identified by W. Max Müller with Byblos (*op. cit.*, pp. 189, 190).

[3] W. Max Müller (*op. cit.* (1893), p. 337 seqq.), who principally bases his argument on the fact that in the Egyptian list of place-names Keftiu comes after the Syrian towns and between Kheta, the Hittite country, and Cyprus. G. A. Wainwright, *The Keftiu-people of the Egyptian Monuments* (*Liv. Anns.*, vi (1913), p. 24 seqq.), looks for Keftiu in the Gulf of Issus (pp. 30–1). His elaborate analysis of the objects borne by the tributaries of Senmut's Tomb (which he concedes to Crete), and of those of divergent forms from other tombs (which he attributes to his Cilicians), is itself a valuable contribution to the research of the subject, though it cannot be said to prove his thesis. It should moreover be borne in mind that much new evidence has come to light since Mr. Wainwright's publication.

claim adherents. The costume itself, as shown below,[1] represents a Minoan fashion. Nor can any too rigid deductions be made from objects carried by individual figures. There was borrowing on both sides. The well-known 'flower bowls' of Egyptianizing Syrian fabric, with their lotus buds and flowers, appear in Minoan hands. At the same time ewers of Minoan type and characteristic 'rhytons' such as those in the shape of bulls' heads are also borne by Syrian tributaries.

Mutual borrowing of Syrian and Minoan art.

The interpenetration of the works of Minoan artificers on the Syrian side goes back, as we learn from the Byblos find, to the days of Amenemhat III (*c.* 1935–1904 B. C.), in other words to the earlier phase of the Second Middle Minoan Period.

At a later date, when Minoan or Mycenaean settlements unquestionably existed in Cyprus, we trace a similar reaction of the intrusive Aegean art on that of Assyria and the Hittite lands. Here, too,—as is well illustrated by a specimen from Ain Tab,—a Cypro-Minoan type of bull's head 'rhyton' was imitated in the Southern and Central regions of Anatolia.[2]

Minoan reaction on Anatolia

In this connexion it is interesting to refer to certain hitherto unnoticed parallels which carry back the imitation of Minoan 'rhytons' of this class to an earlier date than this on the Northern littoral of Asia Minor. From the neighbourhood of Amisos and of other sites on the coast of Pontus have been recently obtained specimens of a class of polychrome ware, including remains of a series of 'rhytons' of the bull's head type,[3] all of very similar fabric and decoration. These have been described as of 'Ionian style', and referred to the sixth or even the fourth century[4] before our era. One apparently constant phenomenon connected with these vessels has, however, escaped observation. Round the necks, as is well seen on the Louvre specimen reproduced in Fig. 422, runs a plant with ivy-like leaves and double and triple stalks. But the illustrative materials given in § 53 above[5] sufficiently reveal the fact that the plant here seen, with its divergent stalks, is in fact

and Pontus.

[1] See p. 754.

[2] See A. E., *Tomb of the Double Axes, &c.* (*Archaeologia*, lxv), p 94, Fig. 97.

[3] Several specimens are in the Louvre, and have been described by H. de Genouillac, *Céramique Cappadocienne*, i and ii (1926), who classifies them as of 'Ionian style' of the sixth century B. C. or later (*op. cit.*, i, p. 32, and cf. p. 64: 'Category xxv'). Others are in the Ashmolean Museum.

[4] *Op. cit.*, i, p. 64. M. de Genouillac says of the rhyton (*op. cit.*, ii, Pl. xiii; Fig. 422 here): 'Je suis porté, à cause de la terre, à le classer ... vers le IVe siècle.' The danger of this kind of ceramic classification, based largely on material (which was always at hand, for earlier or later potters), could not be better illustrated. An error of a thousand years in one chronological 'category' must carry doubt into the other twenty-four.

[5] P. 478 seqq.

a closely imitated form of the 'Sacral Ivy' of Minoan decorative art. It corresponds in fact with a two-stalked type characteristic of L. M. I *b* vases.[1] The 'rhyton', therefore, may be dated from the latter part of L. M. I *b*, which, as we know, was contemporary with Thothmes III's reign, or, at

'Rhytons' from Amisos showing L. M. I *b* influence.

Fig. 422. Bull's Head 'Rhyton' from Amisos, Pontus, showing Imitation of Sacral Ivy Decoration on L. M. I *b* Vases.

most, the beginning of the next Period—in other words, from round about 1450 B. C. It follows that the merchants of Keftiu, of whose enterprise in the Easternmost Mediterranean angle we have at this time so much evidence, had also extended their activities along the Southern coasts of the Euxine.

[1] See, for instance, above, p. 485, Fig. 291, *c* (Kakovatos). With three stalks we see it on a one-handled *alabastron* of local type from Volo (p. 512, Fig. 315, *f*).

§ 61. West Porch and Entrance System, Earlier and Later: The 'Corridor of the Procession'.

Two lines of Causeway to West Porch—single and double; Contradictory aspects of approach; Explained by traces of original entrance running East; Slabs of double Causeway continuing under later façade wall; Traces of original through passage West to East; 'Proto-palatial' Magazines marked with cross paté*; Later Porch oriented for entrance to South; West façade of Palace insufficiently drawn back, leaving awkward angle; Epoch of these radical changes end of M. M. I* a, c. 2000 B. C.*; Earlier plan of new entrance system on a lesser scale than later; Gypsum stumps of dado of earlier Corridor; Both this and earlier doorway narrower; Remains of original gypsum paving beneath later; M. M. III* b *pottery beneath restored West Porch; Blocks from earlier entrance in later pavement—bases of earlier door-jamb and facetted block; Fragments of rosette reliefs; Early use of saw in cutting hard materials; Transverse interior causeway of Porch; The restored West Porch and Entrance—its grander scale; Painted plaster decoration of Porch; Imitation marble squares; Galloping bull—part of acrobatic scene; Stately double portal; Interior arrangements of West Porch; Discovery of 'Porter's Lodge'; Central room for State Receptions—place for Throne; Earlier entrance passage beneath later; Its fresco remains, belonging to same class as 'Ladies in Blue'; The 'Corridor of the Procession'—wider than preceding; Its frescoes covering wall to pavement; White stucco coating of central gypsum slabs, red on schist wings; Processional frescoes of walls; West end of Corridor broken away; Traces of its Eastward continuation; State approach to South Propylaeum and to 'South-North Corridor' leading to Central Court; Pavement ledge of Eastern section in position; Circuitous character of State Approach.*

Two lines of Causeway to West Porch.

It has been already noticed that the West Porch, which was, at any rate in the days of the Middle and Later Palace, the State Entrance, was approached from the Central Court by two lines of paved Causeway. One of these, running from North to South, which brought the Porch into connexion both with the Theatral Area and the Royal Road, and thus might be thought to have been of primary importance, consists of only a single series of paving slabs. The other, running from West to East, and immediately bordering the front of the Porch, is, on the contrary, constructed of a

double line of paving slabs, though prima facie its functions were by no means so important as those of the Northern branch. From its direction, moreover, it would seem to have been constructed to serve an entrance passage running East (see Fig. 423).

Contradictory aspects of approach.

To these contradictory aspects, moreover, must be added a peculiarity in the construction of the Porch itself, which offends any architecturally trained eye. Instead of standing fully open towards the Court, it is so set that a part of its Eastern section is concealed by a projecting angle of the West Palace façade, giving the whole an asymmetrical aspect.

Explained by traces of original entrance running East.

The explanation of these anomalies was finally supplied by a careful analysis of the existing remains, revealing elements of earlier construction, and showing that the plan of this Palace entrance had in fact been radically changed. A clue to an original arrangement, according to which the main entrance here faced due West, is supplied by the appearance, a little in front of the neighbouring section of the West façade, of a series of great foundation slabs, already referred to, showing that the older frontage of the building had taken a course some three metres West of its later line.[1] From the way, moreover, that the base-blocks are set in a curving order at their Southern end, it has already been inferred that the orthostats above had here curved in, as in the case of the old façade visible in the N.W. angle of the Central Court. As suggested in the first Volume of this work, we seem to have to do with two diagonally opposed corners of what may have been, partly at least, in the original plan a free-standing *insula* of the building.[2]

Slabs of double Causeway continuing under wall.

Supplementary investigations in this area undertaken in 1923 and the succeeding years made it clear that there was in fact an open passage leading East into the building at the South-West corner of this original *insula*. It was found that the terminal slabs of the broader causeway that runs from West to East were actually cut into by the plinth that here forms the angle of the new Palace façade. A part of the Eastern border of the terminal slab, the Northern section of the succeeding slabs (*b* and *c*), and the Eastern border of 4 have been hacked away to make room for this new structure (see Plans, Figs. 423 and 425), the chips being set in the interstices, or worked into its base.

Other traces are not far to seek of this earlier arrangement, to which, as in analogous cases, the term 'proto-palatial' may be applied. Beneath the walling of the façade angle at the West end of the First Magazine—itself,

[1] See *P. of M.*, i, p. 130, Fig. 96, and see above, pp. 613, 614, for the insertion of the altar in the interspace between the older and later frontage line.

[2] *Ibid.*, p. 139, and compare p. 203.

as a test exploration between its orthostats showed, of not later date than the close of the First Middle Minoan Period—there are visible the limestone pavement slabs of an earlier structure. Similar early slabbing runs under the West end of the early Magazine C (see Plan, Fig. 425).

There are even indications that, from the point where we thus have evidence of an opening Eastward in the older Western façade line, there had

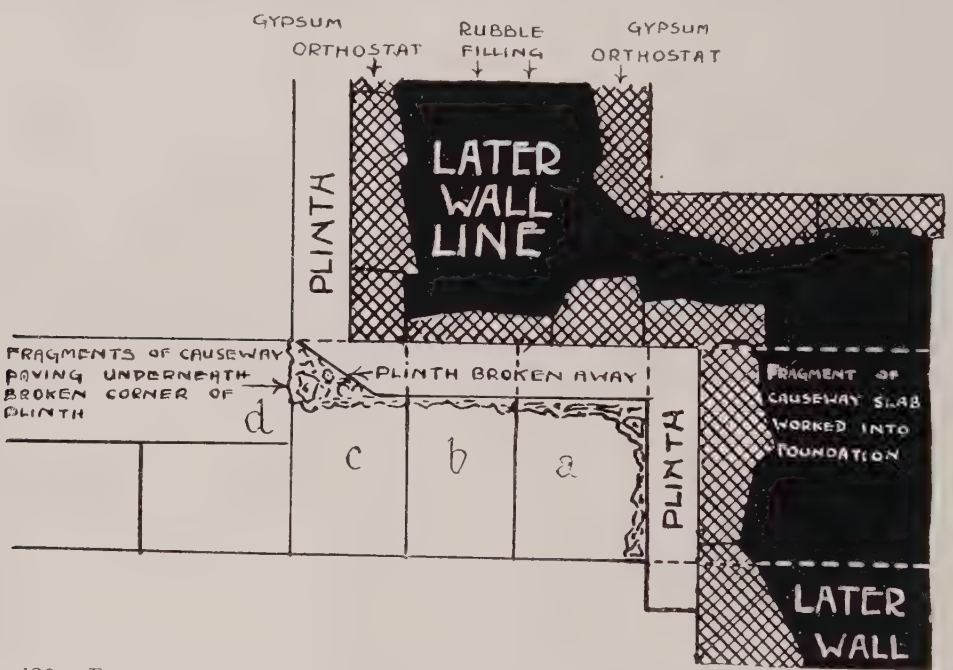


Fig. 423. Plan showing Course of Old Entrance Causeway from the West running under Wall-lines of Later Façade.

Traces of original through passage W. to E.

been—in accordance with the 'insulation' of the earlier Palace plan—a through avenue to the Central Court. The Southern section of the Third Magazine, which would have included part of the original entrance way, corresponds in fact with a passage through the Eastern wall-line of the Long Corridor. This continues East, past the jambs of very early Magazines cut through and, except for their jambs, practically obliterated by the later cross-walls that run at right angles to them (see Plan A at end of Volume). As planned, however, they had formed a series of three or four short compartments, such as are found at Phaestos. These abutted on what may well have been a wider and more important corridor running from West to East, and forming the continuation of the preceding section on the West side of the Long Corridor. A view of this passage in its later shape, looking West, is given in Fig. 424.

The typical sign on what remains of the gypsum jambs of the early Magazines is the cross *paté* ✠, not found elsewhere on any Palace blocks that remain in position. In the corresponding area, however, on the West side

Early West-East passage-way.

FIG. 424. VIEW OF EARLY PASSAGE-WAY LEADING EAST FROM ORIGINAL WESTERN ENTRANCE PAST PROTO-PALATIAL MAGAZINES WITH CROSS *PATÉ*.

Proto-palatial magazines with cross *paté*.

of the Long Corridor, where the walls are reconstructed out of earlier remains, this sign is continually repeated on fragmentary blocks,[1] a strong indication that some system of Magazines analogous to the Eastern group had here existed. That there were in fact Magazines in this area belonging to an earlier Palace is shown by the fact that near the Western end of two of the Magazines of the later series—I and II—small pits were struck containing vessels of M. M. I *a* types, the larger of which had been cut through by the later floor.[2] In the latter case, contained within a larger wide-mouthed jar, was found a series of small tumblers of exquisitively fine 'egg-shell' fabric. These are identical with specimens from the contemporary 'Vat Room' deposit [3] that has supplied the best remaining record of the cultural development already reached in this 'proto-palatial' stage (M. M. I *a*) at Knossos.

So far as concerns the old West Entrance at Knossos, with its Eastern direction, the above evidence thus tends to show that, according to the original or 'proto-palatial' plan, a through passage may have led to the Central Court a little to the South of the borders of the 'West Central Insula' as defined in the Diagrammatic Plan of the later arrangement (vol. i, facing p. 203). Whether this Western section of a cross-line, analogous to the *decumanus maior* of the Roman Castrum, found its continuation East of the Central Court cannot, however, be ascertained, since the 'Great Cutting' later executed in that region for the Domestic Quarter would have obliterated all traces of it.

Later porch oriented for entrance to South.

But the Western Porch of the Palace as we know it,—in some ways the most magnificent and the most elaborately planned feature of the building,—faces, as we have seen, due North, and opens on what was in later times the main entrance corridor, the first section of which runs South.

But W. façade of Palace

It is still to be observed that, though the orientation of the new approach was so different, the builders of the West Porch were in some essential respects guided by the lines of the older arrangement. Thus the

[1] The walls of Magazine I (including that common to Magazine C), Magazine II, and the opposite wall of the Long Corridor, and a stray fragment near, supply ten examples of this type, in two cases accompanied by the 'door' sign ⊟, which is also extraneous to the later Palace series. The material of the fragmentary blocks was in nine cases gypsum, in one, limestone. The star ✳ and 'window' ⊞ sign occur respectively on the later gypsum jambs between Magazines 1 and 2, and 2–3. Otherwise the double-axe sign is prevalent in the later arrangement (see Plan, *P. of M.*, i, p. 449, Fig. 322).

[2] *Ibid.*, i, p. 172, and cf. *Knossos, Report*, 1900 (*B. S. A.*, vi), p. 21 (there erroneously ascribed to Magazine III), and *B. S. A.*, vii, p. 48.

[3] See *P. of M.*, i, p. 168, Fig. 119, *a*.

gypsum façade lines at its South-Western angle correspond on the West side with the border-line of the first of the cross-slab series of the old Causeway ning Eastwards, and on the North side follow its Western margin so far as its remains are preserved. So, too, this old Causeway continued to serve as an approach to the new Porch which was so constructed as to border it at right angles. It is as if the whole arrangement had been simply pivoted round from East to South.

insufficiently drawn back.

It is not easy to see the reason of this adherence to these earlier lines in laying out this angle, and by this means creating an awkward corner in the new Porch, which destroys its architectural symmetry.

Is it possible that the architect in his laying out of the grand new entrance was partly hindered by considerations of another kind? It looks, indeed, as if the withdrawal Westward of the old façade line on that side of the West Court may have caused certain searchings of heart in pontificial quarters, the evidence of which has been traced above[1] in the setting up of an altar between the old and the new frontage line.

The striking change in the entrance system is chronologically fixed by the analysis of the sherds in the clay and rubble filling between the orthostats of the later façade on this side. These, as has been already shown, belonged preponderantly to the earlier half of M. M. I, with a smaller number of M. M. III *b* fragments, pointing to the restoration of the frontage line necessitated by the great catastrophe that occurred at that epoch. These analyses concerned absolutely pure materials, having been extracted from the space between the rubble filling the very base of the interior of the wall. A further examination, moreover, was carried out in 1925. This was made at the back of Magazine I, near the Southern end of the orthostatic frontage, at a point immediately beyond which one of its gypsum slabs was broken away, while the interior wall-line that here began had been largely reconstructed. In spite, however, of these elements of disturbance, the result was practically the same, M. M. I *a* and M. M. III *b* sherds respectively being still preponderant, in spite of an admixture of a few intrusive Late Minoan fragments.[2] It is clear that the later façade wall was originally constructed about the close of the first half of M. M. I, or round about 2000 B. C. The approximate date of its restoration is equally well fixed by the M. M. III *b* fragments.

Epoch of these radical changes end of M.M. I *a* *c.* 2000 B. C.

On the other hand, the evidence supplied by the pottery found under

[1] See above, pp. 613, 614, and Fig. 385.

[2] The sherds, as analysed by Dr. Mackenzie and myself, consisted of 13 M. M. III *a*, 12 M. M. III *b*, 19 Late Minoan *in genera* from L. M. I. while 24 were unidentified.

Wall analysis of W. façade.

the great foundation slabs of the earlier building lead to the conclusion that it dated from the beginning of the First Middle Minoan Period. An exploration, already referred to, beneath the second of these slabs from the North end disclosed the presence of a fractional amount of sherds belonging to that epoch. A further examination made in 1925 beneath the adjoining slab South of this—where less of the Early Minoan stratum had been left above the Neolithic when this part of the site was levelled by the Minoan architect—entirely confirmed this result. Fifty-four M. M. I fragments were here picked out, none of them showing signs of belonging to anything but the incipient stage of its earlier phase (*a*).

Earlier and later façades both within M. M. I.

It would thus appear that this original frontage line West had been laid out at a date appreciably earlier than the later façade. They both belong, however, to the same general Period, and the chronological gap between the two foundations cannot be great, probably not more than two or three generations.

There is no certain evidence as to why the earlier Palace, which rises thus in shadowy form, was so short-lived. The history of the site, however, points with great probability to a seismic catastrophe such as those that overthrew the building in its later stages. If we are to suppose some dynastic change, we have yet the curious evidence of religious continuity supplied by the altar-base between the earlier and later frontage lines.

Extent of proto-palatial remains.

Of the high cultural development already attained by this 'proto-palatial' epoch, the contents of the Vat Room Deposit[1] afford sufficient proof, illustrating as they do so many branches of Minoan art, such as the egg-shell ceramic ware and beginnings of polychromy, faïence fabrics and inlays, lapidary work, and the evolution of a conventionalized hieroglyphic script.[2] The evidence at our disposal points to this earlier building having extended over the greater part of the West wing of the existing Palace, including what seems to have been a kind of 'donjon' above the North entrance. There is, indeed, some reason for supposing that it may also have covered a large part of the Eastern slope.

Over most of this area the destruction has been very complete, and the changes of arrangement in the new building were in many respects so radical that its architect would often seem to have completely disregarded the older plan. At the same time, in the West Quarter, where the later stages of the Palace start from the same level, it is probable that more of the

[1] *P. of M.*, i, p. 165 seqq.

[2] For the hieroglyphic script, compare also contemporary material (M. M. I *a*) from the Early Pillar Basement S.E. of the Palace (cf. *P. of M.*, i, p. 196, Fig. 144).

original arrangement has been incorporated in it than might have been supposed. Thus, as already noted, we see in the middle section of the West Central 'Insula' a line of three Magazines of the old 卐 system partly incorporated in the later phase that involved a different orientation. In the adjoining section North, on the other hand, as the remains of the early vats and other indications show, the proto-palatial orientation was itself largely followed.

Beginning of 'Age of Palaces'.

That the 'Age of Palaces' in Minoan Crete itself goes back to the earliest phase of M. M. I, and consequently to a date approaching 2100 B. C., no longer, indeed, needs such piecemeal demonstration as may be extracted from the somewhat obscure remains underlying the Palace walls of Knossos.

Happily, as pointed out above, the discoveries at Mallia[1] have now supplied us with much fuller materials for the knowledge of a Minoan Palace of that early date, which does much to eke out and explain the evidence that so much at Knossos has been destroyed by later foundations.

From what has been already said, it may be regarded, then, as an ascertained fact that, at a time when the earliest M. M. I phase (*a*) was already stratified, the original Palace plan on this side was completely remodelled, and that the Western entrance, which in the proto-palatial arrangement led due East, was so shifted as to give access to a Corridor running towards the South.

Earlier plan of new entrance system on a lesser scale than later.

But though this new orientation was followed throughout the whole later existence of the Palace, the final evolution of the West Porch in the grandiose form in which its remains now appear, was by no means as yet achieved. There exists, in fact, conclusive evidence that the Porch as erected during the later phase of M. M. I stood in connexion with a narrower entrance passage, and was itself probably of lesser dimensions.

Its front line may have stood farther back from the line of the façade angle than in the later arrangement, according to which the open area included within this return of the frontage wall was confined to the width of the old causeway running in from the West. But the prolongation of the gypsum orthostatic construction of the West Palace wall, South of this line, affords some presumption that the open space in front of the Porch extended three and a half metres farther in that direction. At this point, in fact, there appears on the face of one of the orthostatic blocks a cutting of the usual kind—in this case 8 cm. deep—for the reception of the dado slab that marked the beginning of the interior decoration of the original Porch (see Plan, Fig. 425).

A further interesting feature made itself apparent near the point

[1] See above, p. 269 seqq.

Gypsum stumps of dado of earlier corridor.

where the orthostatic system of the Palace wall comes to an end. Just South of this the beginning of a line of gypsum stumps came to light representing a series of dado slabs that had belonged to an interior wall running South, 48 cm. West of the line of the orthostatic wall (see Plan, Fig. 425). These, no doubt, formed the continuation of the arrangement implied by the

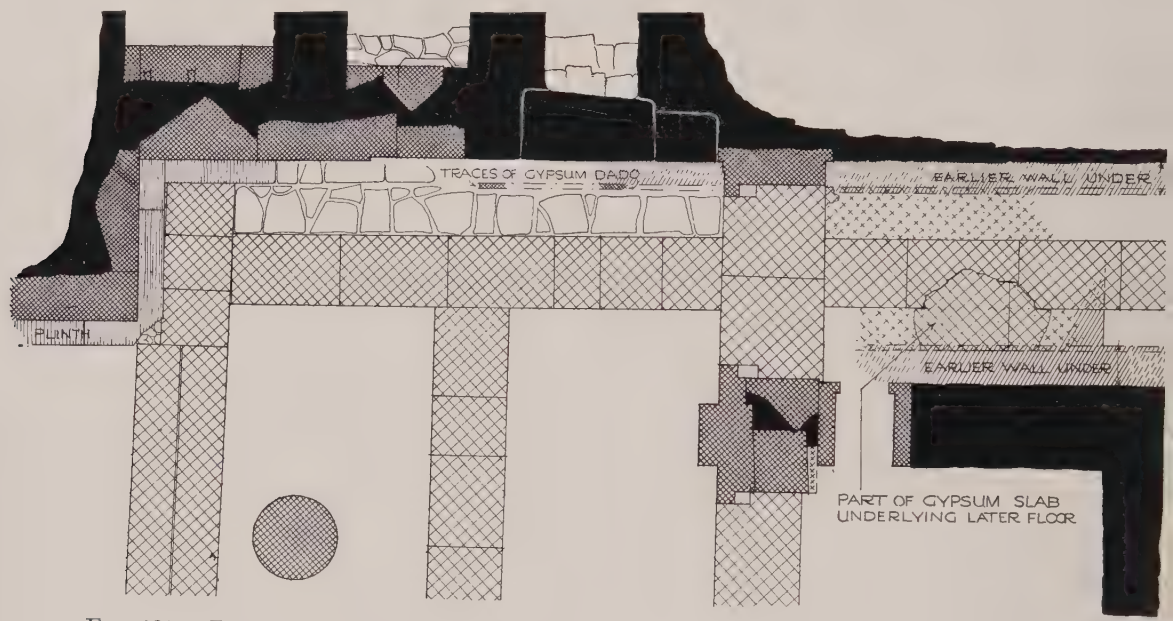


Fig. 425. Plan of Section of West Entrance showing Lines of Earlier Dado and of Walls of Narrower Passage.

cutting in the gypsum orthostat above described, and showed that the system to which they belonged had taken a turn of the width indicated. Part of an earlier wall-line, to which the dado stumps belonged, was also found, incorporated in the later pavement. Traces of these stumps of dado slabs were followed South, moreover, to a point immediately within the Eastern jamb of the existing entrance to the 'Corridor of the Procession'.[1] The entrance system from the original Porch seems to have been only slightly South of the later line of doorways.

Early doorway and corridor both narrower.

The evidence at our disposal, as will be seen from the Plan, Fig. 425, shows that the doorway on which the early dado line abutted was itself narrower than the later structure. The space between this dado and the

[1] Just beyond the Southern end of this jamb was found a thicker fragment of gypsum probably belonging to the pavement of the earlier Corridor, which, as appears from the underlying slab brought to light a little farther South (see p. 669), seems to have been wholly of gypsum.

edge of the central line of gypsum slabbing, according to the system of paving adopted in the later Corridor, was 68 centimetres. As this later line of slabbing is 1·02 metres wide, it might therefore be assumed that the earlier Corridor had a total width of 2·38 m. as against 3·34 m. in its enlarged form.

Remains of original gypsum paving beneath later.

A remarkable discovery made in 1925 below the schist paving of the Western wing of the later Corridor, about 1·85m. from the entrance, confirmed this theoretic conclusion with remarkable accuracy. Beneath the green schist slabs, themselves resting on a thin clay mortar layer, there here came to light a gypsum paving slab in position, as its own clay bedding showed, at this slightly lower level. On its East side it extended for a distance that could not be ascertained under the later gypsum slab that here formed the centre of the new Corridor.[1] Its West border, however, was clearly defined and ran 68 centimetres West of the later gypsum slabbing, in exact conformity with the previous datum. On this line, moreover, traces began to appear of the foundation blocks of the original West wall of the Corridor, which could be traced South for some metres (see Plan, Fig. 425).

Two points are specially to be noted in regard to this earlier pavement section. It is in the first place clear that the gypsum slabbing ran across the whole breadth of the passage, and that there were no plastered schist wings as in the later arrangement. In the second place, it lay at a slightly lower level—allowing for the decomposition of its surface—about 10 cm.—than that of the later pavement.[2] It looks as if, according to the old arrangement, there may have been a slight step down immediately inside the entrance.

Later Porch proportionally smaller.

The width of the earlier passage—2·38 m. as compared with 3·34 m.[3]—was as nearly as possible five-sevenths of that of the later, which may give a clue to the proportional scale of the earlier and later Porch. Beyond this general conclusion, however, little can be made out as to the limit of the extension Westward of the earlier Porch. A series of careful explorations

[1] Beneath this lower gypsum slab, tests made in 1925 (No. 7 *a*) showed a fair proportion of M. M. I *a* sherds besides E. M. *in genere*, and some Neolithic. Deeper down, to 40 cm. (No. 7 *d*), only a few E. M. and many Late Neolithic. On the edge of the wall here, however, where later disturbance had taken place, two intrusive M. M. III sherds occurred. Between the two gypsum slabs one M. M. II fragment and M. M. III *b* occurred in the clay bedding (Test 7 *b*).

[2] The gypsum paving slab of the later Corridor was 5 cm. thick, and beneath it was a clay mortar bed overlying the earlier slab. The original thickness of the latter may also have been 5 cm.

[3] Allowing in each case 1·02 m. for the width of the central line of gypsum slabbing which continued in use in the later period.

beneath the pavement slabs, and the analysis of the sherds brought to light, established the fact that about the close of the last Early Minoan Period, this whole area, the Neolithic surface of which fell away to the West, was already artificially levelled. The filling in shows an almost exclusively Early Minoan composition, slightly intermixed with Neolithic. Only sporadic sherds of Early M. M. I *a* came to light.

M. M. III *b* pottery beneath restored W. porch.

In the superficial soil, however, pottery of the M. M. III *b* class came to light, identical in character with those from beneath the wings of the Procession Corridor, marking the date of the reconstruction of the Porch in its present shape, after the great earthquake of that epoch.

A striking feature of the new pavement of the Porch, which otherwise consisted of gypsum slabbing and paving stones of hard 'iron stone', was the incorporation of certain extraneous blocks belonging presumably to the structure that had preceded it.[1] In itself this admixture of heterogeneous elements did not matter, since the whole interior of the Porch, like the Corridor beyond, had been originally covered with a hard, coloured stucco.

Blocks from Earlier Entrance in Pavement of West Porch.

Blocks from earlier entrance in later pavement. Bases of earlier door-jamb and half-column.

Among these intrusive elements the most obviously significant was the foundation block of a door-jamb composed of fine conglomerate, and showing marks of the saw, which had been set into the pavement just outside the right jamb of the restored entrance (see Plan, Fig. 427). Outside the adjoining doorway was a patchwork series consisting of alternating bars, three of conglomerate, like that of the block described, and two of green schist.[2] Several other intrusive slabs were of the latter material, which our workmen recognized as identical with a form of schist still quarried at Spinalunga.[3] The most remarkable of these was a block inserted in the pavement a little South of the bars, square at one end, and roughly cut, by means of small facets,[4] into a semicircular shape at the other (see Fig. 426, *a*, *c*). It has the appearance of an unfinished base of a half-column, possibly with flutings answering to the facets completed in stucco. Is it possible that there had been an arrangement here similar to that of the entrance of the

[1] A series of these was provisionally raised for examination, and the M. M. III *b* 'earthquake stratum' was found beneath them.

[2] The schist bars were 73 centimetres long and 20 cm. square. In their long sides were dowel holes 0·042 cm. in diam. and 0·04 deep. The circumference of two others had been drilled on the other side of one of the bars, but left unfinished with the cores standing within.

[3] These are marked S on the Plan, Fig. 427.

[4] The facets are not quite symmetrical.

'Treasury of Atreus', with its two lateral half-columns? In connexion with this it is to be noted that two fragments of rosette reliefs resembling those from the area of the South-West Porch [1] and from the South Propylaeum [2] were found in an adjoining basement space East.

Fragments of rosette reliefs found near.

The skilful use of the saw is a recurring feature. It is visible, not only on the close-grained limestone friezes to which the rosette fragments belonged, and the hard schist bars and half-column base, but also notably

Early use of saw in cutting hard materials.

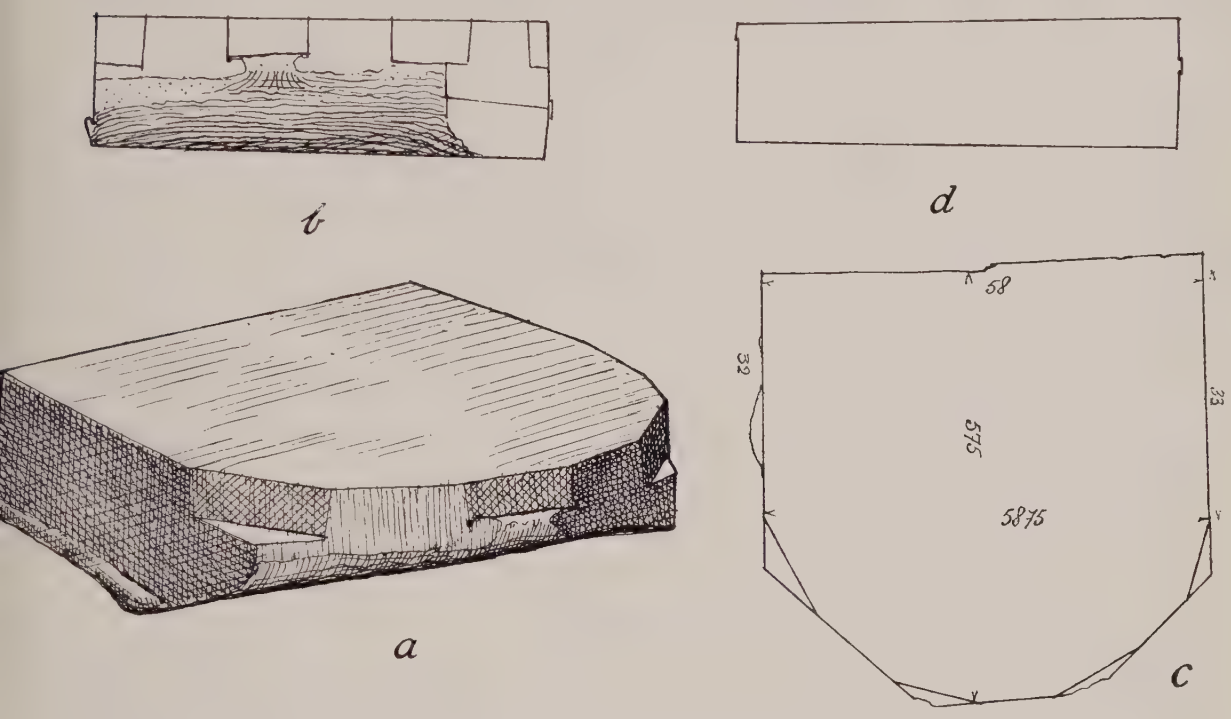


FIG. 426. FACETTED BLOCK OF GREEN SCHIST (SPINALUNGA STONE) EMBEDDED IN PAVEMENT OF WEST PORCH. (BY PIET DE JONG.)

in the case of the conglomerate bars and the base of the door-jamb—all belonging to the earlier entrance, going back to the very beginning of the Third Middle Minoan Period. It is equally characteristic of the more or less contemporary work in similar materials at Mycenae, such as that of the Propylon and of the portals of the Atreus and Clytemnestra tombs, and it illustrates the survival of a knowledge of stone-cutting inherited from very early days of Egyptian contact, which did not, indeed, shrink from much harder materials such as the Aeolian liparite, or the Melian obsidian.

Attention has already been called in the preceding Section to the promi-

[1] See above, p. 163, and Fig. 83.

[2] See below, p. 694 seqq., and Figs. 436, 437.

nent place taken by the bronze saw among the domestic hoards of Knossos. The tradition which made Perdix, or Talôs—the rival of Daedalos—the inventor of the saw, really preserved an historic fact.

Cross-line of Causeway within Porch.

Transverse interior causeway of porch.

The series of gypsum slabs that traverse the East wing of the Porch from North to South finds its continuation in the central pavement of the later Corridor. The outer border of a similar band of transverse slabbing that runs Westward across the Porch, at right angles to this, very nearly corresponds with the end of the orthostatic system of the Palace wall (see Plan, Fig. 427), and its inner border may not improbably have marked the outer line of the covered area of the earlier Porch.

Cross-line or causeway in W. Porch.

The Western prolongation of this cross-line of gypsum slabs has been much destroyed, owing to the greater falling away of the Neolithic surface beneath the filling on that side. Explorations, however, carried out in 1923, have made clear the opening through it which passed through the West wall of the Porch as it existed in its final arrangement[1] (see Plan, Fig. 427). The function of this gangway, both in the earlier and later plan, must have been to give access, by means of a flight of descending steps, to the somewhat isolated South-West area of the Palace that lies on that side (see General Plan A at end of Volume). As to the further course of the interior passage to which the steps must have led, nothing can be said, since the already ruinous remains of the South-Western region were almost entirely occupied and overlaid by a large private construction dating from the beginning of the New Era. This South-West House, as will be seen, affords another instance of the actual invasion of parts of the Palace site by private persons, probably of high official rank, at the epoch following on what appears to have been the great earthquake that overthrew so much of the M. M. III Palace. It seems to have contained a small peristyle, and a good built drain ran outside its well-preserved Southern façade.

The Restored West Porch and Entrance.

The restored West Porch and Entrance.

The last elements under the floor of the Porch and, more abundantly, under the green schist pavement of the wings of the widened 'Corridor of the Procession' belonged to the fully developed M. M. III *b* class, which may be taken to demonstrate that the West Porch as restored and enlarged

[1] As the plan of the Porch given in *P. of M.*, i, p. 214, was made previous to this discovery, this opening could not be given, and the cross-line of slabbing conveyed therefore no meaning.

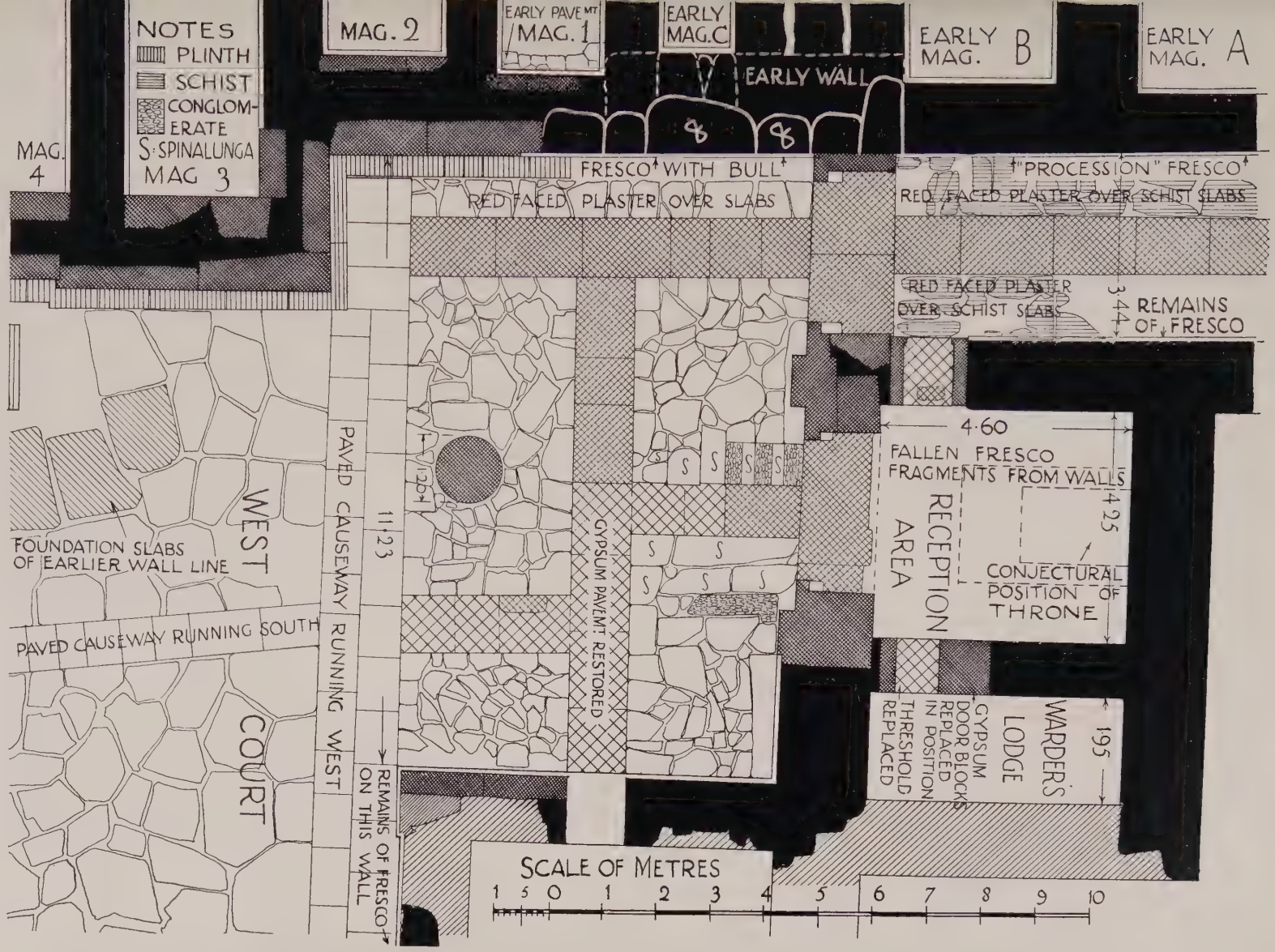


Fig. 427. Plan of West Porch and Entrance System as restored after Catastrophe towards Close of M. M. III *b*.

dates from that post-seismic M. M. III *b* epoch that heralds the beginning of the First Late Minoan phase.

Its grander scale.

In spite of its slight recession behind the façade angle, the genesis of which is explained by the antecedent stages of the building, the Porch in its renovated form must have presented a truly grandiose aspect as seen from the West Court. A sketch showing the existing state of the remains is given in Fig. 428 (cf., too, Suppl. Pl. XXIII). The general effect of this monumental structure, with the painted wall decoration dating from the close of the Palace period, is well shown by the restored drawing of the late Mr. F. G. Newton (Fig. 429). The width of the central column-base, of gypsum, was about 1·35 metres, but there are indications that the actual diameter of the base of the shaft was in this case abnormally less—namely, 1·11 m.

From a series of contemporary examples it has been possible to deduce the conclusion that, at this epoch at any rate, the height of the Minoan column, including capital and abacus, was as exactly as possible five times the diameter of the base of the shaft.[1] The height of the architrave of the West Porch may therefore be estimated as 5·55 metres, or about $20\frac{1}{2}$ feet, above the pavement level.[2] The breadth of the new Porch was just double this—11·23 metres—with a depth of 6 metres, and it is noteworthy that the original projecting plinth of the orthostatic wall to the left is broken away from the point—2·20 m. South of the inner corner of the façade—where the front line of the Porch would have intersected it.

Painted Plaster Decoration of West Porch.

Painted plaster decoration of Porch.

This was doubtless done in order to secure a broader field for the fresco designs on the inner surface of the Porch on that side, which reached to the pavement level. The remains of painted stucco decoration that

[1] Thus in the 'Hall of the Colonnades' where the height of the architraves above the floor as preserved by the carbonized remains was 3 metres, the base of the shafts, deducting 5 cm. from 65 cm. the diameter of the stone bases, was as nearly as possible 60 cm. $= \frac{1}{5}$. Similar results were obtained in the Little Palace. An extraordinary close calculation is afforded by the Royal Villa. There the height of the architrave in the Pillar Room, of which the socket remains in the N. wall, is 2·05 metres above the level of the floor of the adjoining Megaron, and it is a fair presumption that the columns there were of the same height. Their bases are about 46 cm. in diameter, pointing to about 41 cm. for the base of the wooden shafts. The columns on this reckoning were 2·05 m. high, thus exactly corresponding with that of the architrave as independently calculated. The height of the upper floor surface, both in the Megaron and the Pillar Room, were the same—3·05 metres.

[2] It is not necessary to suppose that in all cases exceptionally large Minoan shafts like this, which would have had a still larger diameter at its upper extremity, were made of single trunks. Part of a shaft of composite formation has been brought out by the French excavators on the Chrysolakkos site at Mallia.

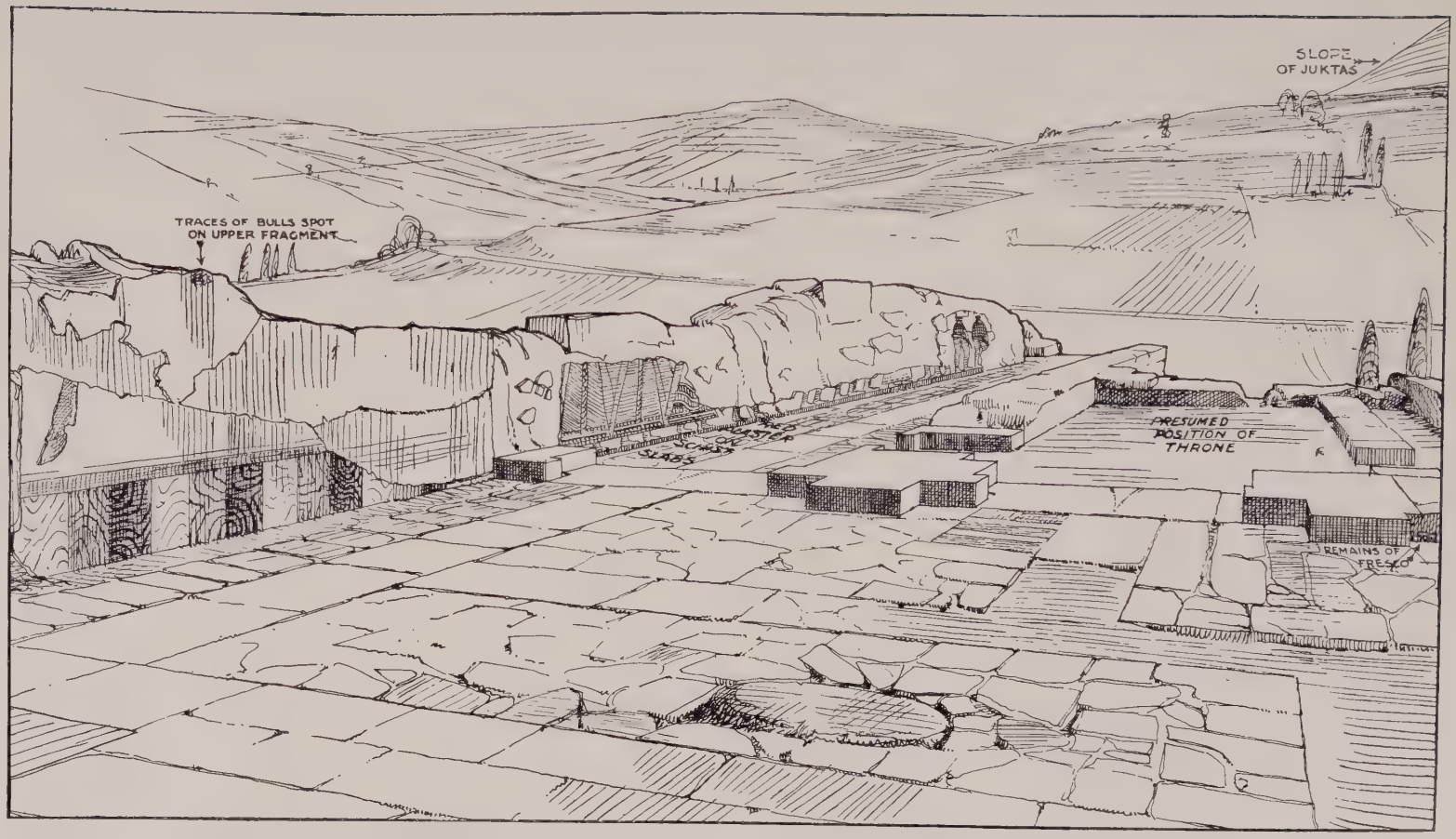


FIG. 428. SKETCH OF EXISTING REMAINS OF WEST PORCH AND ENTRANCE SYSTEM AS FOUND, INDICATING POSITION OF FRESCOES.

here revealed itself belonged, so far at least as concerns their surface layer, to the last age of the Palace (L. M. II). Along the lower part of the field run a succession of squares imitating veined marbles, and coloured alternately yellow, pink, and blue (see Sketch, Fig. 428, and restored view, Fig. 429), a style much in vogue in L. M. II and closely paralleled by the contemporary remains of frescoes in the Ante-room of the Room of the Throne. Above this dado, which was 40 centimetres in height, is seen a creamy white band and, above this again, was preserved part of the fore-leg of a charging bull on the white ground. The subject, of which a restored suggestion is given in Fig. 429, was one of the usual bull-grappling or acrobatic scenes that form such a recurring feature in the later Palace. From its lofty construction the walls of the West Porch afforded a specially favourable field for this class of design, since there was ample room above for the acrobatic performers, male or female, springing at the huge beast's horns or executing somersaults over his back in a manner illustrated by the bronze figurine, Fig. 416 (p. 651), above. On the uppermost layer of painted stucco little beyond the bull's foot had been preserved, but parts of two underlying layers were found[1] with remains of dark spots and sufficient traces to show that the bulls represented were in violent action like that of the Tiryns fresco. That the same system of decoration extended to the other walls of the Porch is shown by the discovery just above the pavement level to the right of the Western entrance portal of remains of similar squares painted to imitate variegated blocks of marble. It further appears, moreover, that a system of painted stucco decoration had extended to the outer wall bordering the West Court on the South. Beyond the fine stylobate block that terminates the Western *anta* of the Porch, there came to light, on the outer surface of the base of the wall that here follows the line of the old double Causeway running E.–W., remains of red-faced stucco. As to the character of the design above this, however, we have no hint. May it have been protected by a verandah with wooden posts and columns?

Imitation marble squares.

Galloping bull: part of acrobatic scene.

These bull-grappling scenes had a special significance in the entrance hall of the great Palace Sanctuary. There is abundant evidence that the sports in which the Minoan 'king of beasts' plays the principal part were held in honour of the Goddess, and the scenes of the *taurokathapsia*

[1] The successive layers of painted stucco were only about 1 centimetre thick, and were formed of very pure lime plaster. Behind this was a solid backing of clay plaster 7 cm. thick. It will be seen that this later procedure represented a great economy of fine plaster. In the case of the M. M. III frescoes of the Corridor (cf. the 'Ladies in Blue' type) the lime plaster itself had an average thickness of about 4 cm., but was not nearly so pure.

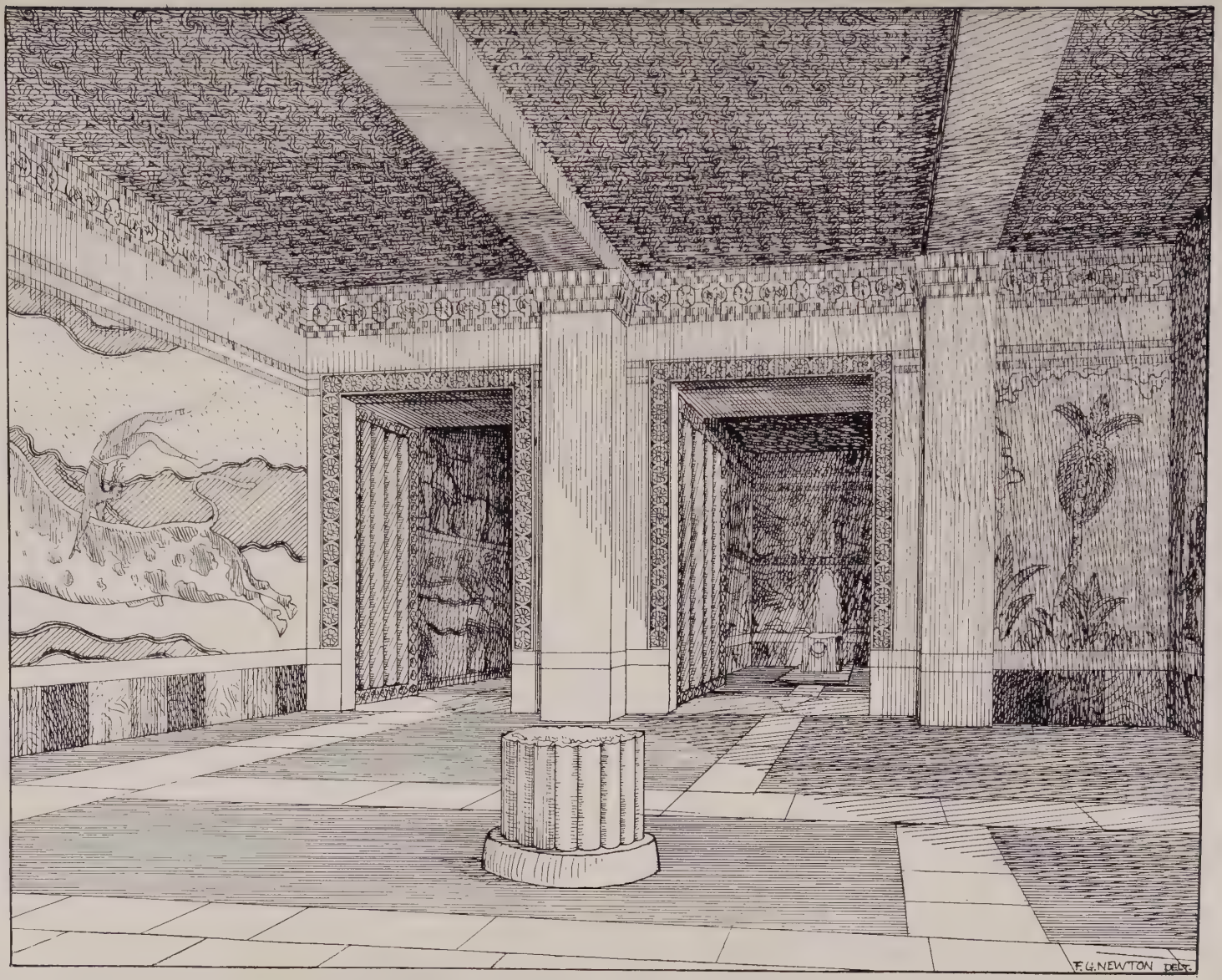


Fig. 429. Restored View of West Porch, by F. G. Newton.

on a series of Minoan intaglios bear the token of their religious character in the 'sacral knot' that is inserted in the field.[1]

Stately double portal.

This outer hall of the Porch led to a stately double entrance, with doorways 2·95 metres wide, showing a broad central jamb, both it and those at the sides bearing clear traces of the wood and plaster pillars that originally rose above them. The portal on the left opened into the enlarged Corridor running South. That on the right gave access to a larger chamber, and thence, as we shall see, into a smaller room where probably a warder or porter lodged.

Interior Arrangements of Entrance System (see Plan, Fig. 427).

Interior arrangements of W. Porch.

Supplementary investigations undertaken in 1922 threw quite a new light on the interior arrangements of this section of the West Porch. From the first it had been a moot question whether there had not been an interior division of the space West of the initial section of the adjoining Corridor, the importance of which was brought into relief by the fact that it was provided with a portal equalling in dimensions that of the stately entrance passage. A row of blocks, mostly gypsum, was here visible lying in a tumbled position and resting on what proved to be an earth surface void of foundations. The possibility, however, suggested itself that, as in other cases, the tumbled gypsum blocks had been turned over by some later builder in search of limestone material, and a trench dug along the Western border confirmed this supposition. At about half a metre below the pavement level, our foreman, Ali Baritakis,[2] who had acquired special skill in tracing out such vestiges, succeeded by careful knife-work in exposing the bedding of a line of wall, 90 cm. in width running North and South, parallel to the tumbled blocks, and proving the existence of an inner room on this side. It was possible even, thanks to the shape and order of the gypsum blocks, after filling in the missing limestone substructure to replace them on the pavement level in their probable order, with an opening 80 cm. wide at the North end. The line of the North and South walls was already ascertained and, as the result of an investigation similar to the preceding, the whole of its foundation bedding of the West wall was brought to light a few centimetres East of the conjectural line assigned to it, and with a width of 1·50 metres.

Discovery of 'Porter's Lodge'.

The dimensions of the inner room thus ascertained to exist were 4·35 m. N.–S. by 2 m. E.–W.[3] (see Plan, Fig. 427). From its flanking

[1] See A. E., *Ring of Nestor, &c.*, pp. 5–7 and Figs. 3, 4, 5.

[2] He died, to our lasting regret, in 1927.

[3] The plan of the West Porch as given in *P. of M.*, i, p. 214, Fig. 158, beside comparative examples of porches from Phaestos (Figs.

position, which through its entrance commanded the line of the two main doorways and that leading into the inner Corridor, this little apartment was well suited to serve as a lodge for a porter or guardian.

Central room for state receptions —place for throne.

The larger room into which it directly opened suggested more important functions. Here, indeed, we may believe that on public occasions the Priest-King himself, enthroned within, acknowledged the salutes of those who defiled through the opposite wing of the Porch on their way to what, on every ground, we must regard as the State Entrance of the Palace. The Eastern portal through which privileged visitors and inmates of the Palace made their way led into the noble processional Corridor beyond that wound round both to the South Propylaeum and, beyond it, to another main Corridor of the building leading up from the Southern Porch to the Central Court.

Probable place of throne.

The bay of the central chamber opposite the Western doorway was itself admirably adapted for the base of a throne or seat of honour like that seen in the Room of the Throne[1] of the Central Court, and in the similarly named room of the Megaron Court at Mycenae,[2] though in these cases the position was at right angles to the Court. In the present case, however, the facing position as regards the West Court would have enabled the *Papa Re* of Knossos to manifest himself on occasion to the gaze of assembled crowds.

Earlier Entrance Passage beneath Later.

Earlier entrance passage beneath later.

A doorway, a metre wide, in the N.E. corner of this State Room led into the interior passage running South known, from the wall-paintings found within it, and partly clinging to its walls, as the 'Corridor of the Procession'. The width of this Corridor was 3·34 metres, and, as already pointed out,[3] it had been preceded by an earlier gangway about a metre narrower. The date of the construction of the later wall on the left was marked by the occurrence in its inner interstices of M. M. III *b* fragments, but many of its limestone blocks showed very early signs, and had in all probability belonged to the construction of the earlier wall, which seems thus to have been shifted back East about half a metre. Explorations made beneath the level of the later pavement of the West wing of the Corridor brought out, as already mentioned,[4] clear traces of the West wall of the original passage in the

159, 160) shows only a single interior room, and the conjectural limits on the West side are only approximately right.

[1] See Vol. iii.

[2] Wace, *B. S. A.*, xxv, p. 186 seqq. and Pl. XXXIII *a*. In the case of the 'House of the Chancel Screen' at Knossos the low stone dais for the seat of honour is placed at the back of a section of the 'Megaron', separated off by two columnar balustrades, between which the occupant of the seat would have been seen facing from the body of the hall (see p. 394, Fig. 225).

[3] See p. 668 seqq.

[4] See p. 669.

shape of a line of foundations running from North to South, with a face about 70 cm. in front of the later wall-line. About eight metres from the entrance a gap appeared where the foundations as well as the earlier wall above had been removed, and the filling material of the void thus caused supplied some very interesting evidence of the decoration of the destroyed wall.

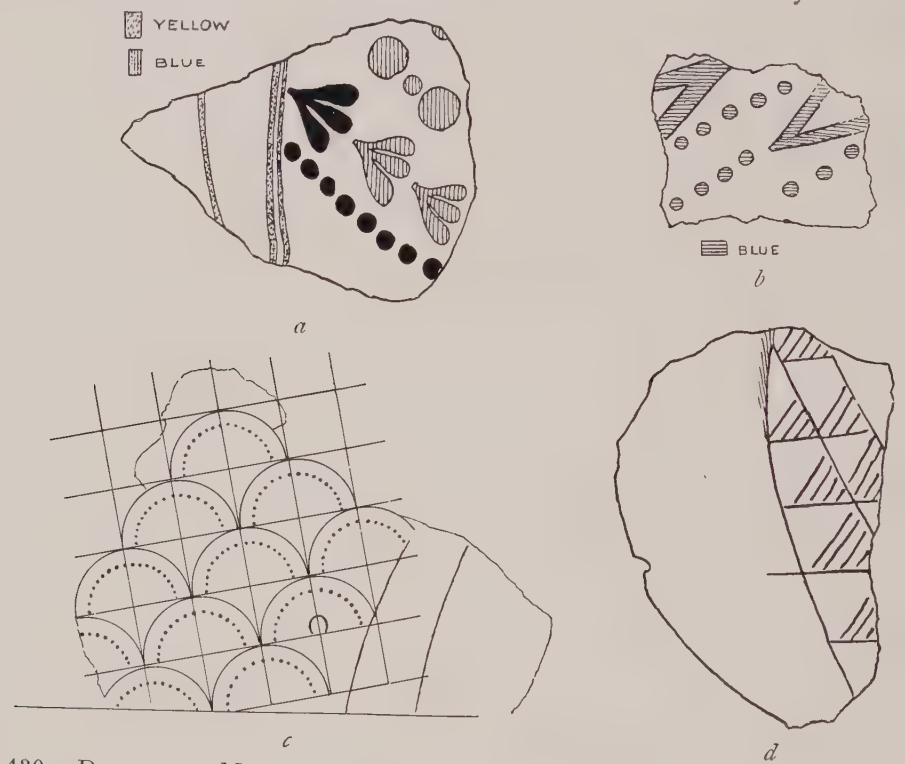


FIG. 430. DECORATIVE MOTIVES ON PAINTED STUCCO FRAGMENTS OF EARLIER ENTRANCE PASSAGE (M. M. III).

Fresco remains belonging to the earlier corridor.

Here, amidst filling stones and masses of carbonized wood, pointing to a considerable conflagration in this quarter, lay heaps of fragments of painted lime plaster, varying in thickness from about 3 to 5 centimetres, and preserving in places the remains of the wooden pins by which they had been attached to the clay mortar backing. Although the painted stucco had much suffered from the action of fire, there were some remnants of the beautifully polished white surface which distinguishes the M. M. III frescoes. Of the designs themselves, however, only enough was preserved to show that they belonged to the same group as the 'Ladies in Blue' described in the previous Volume,[1] which seem to have decorated the great East Hall of

Belonging to same group as 'Ladies in Blue'.

[1] *P. of M.*, i, pp. 544–7 and Figs. 397, 398.

the Palace as it existed in the Third Middle Minoan Period. On one piece, for example (Fig. 430, *a*),[1] are recognizable the festoons of pearl-like beads that adorned necks and hair, together with a string of crocus flowers like those on the bosom of the central figure in the group of the 'Ladies in Blue'. Scale patterns as on these also occurred (Fig. 430, *c*), and a net pattern with cross-lines anticipating the later net pendants of the youths in the 'Procession Fresco' (Fig. 430, *d*). The prevailing colour of the dresses was in this case, too, of a deep blue. The scale, approaching life-size, is the same, and we have all the characteristics of the same delicate technique. As in the former case, recourse was had to very fine cross-lines, sometimes diagonally arranged (see Fig. 430, *c*), either lightly incised or impressed with taut threads when the stucco was still soft, in order to guide the artist's hands in the delineation of the intricate embroidery and ornaments. This was also a favourite procedure of Egyptian artists. There were here, in addition, some small fragments of plants, including a Madonna lily, which point to a picturesque element of the background.

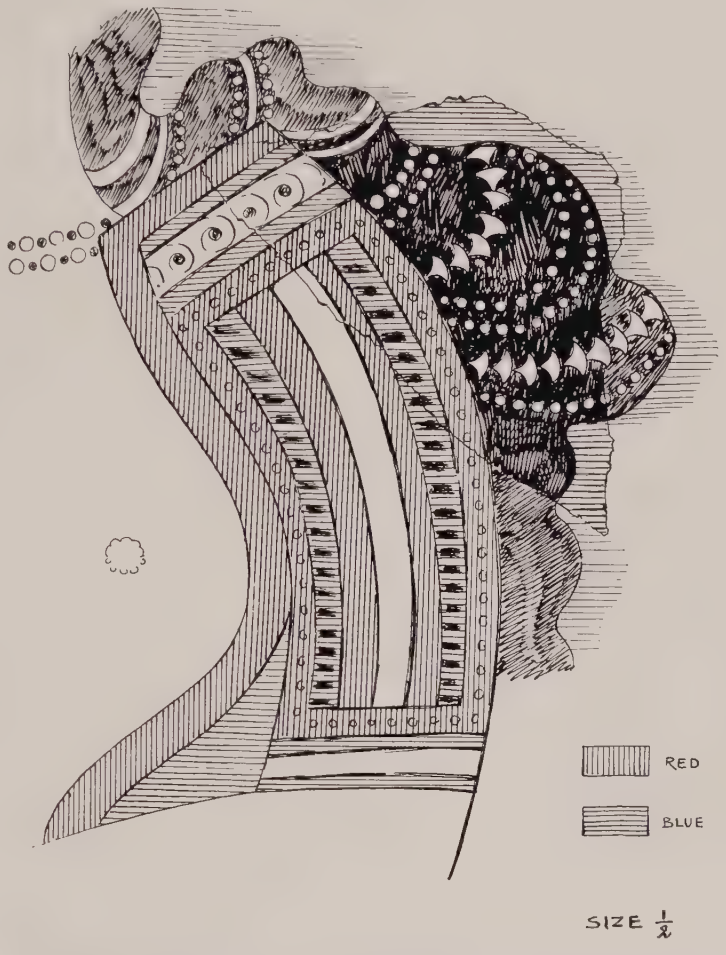


Fig. 431. M. M. III Fresco Fragment showing Part of Lady's Sleeve and Hair; in Style of 'Ladies in Blue'. From North of Palace.

[1] The patterns of this figure are from sketches by Dr. Mackenzie who minutely examined the burnt fragments.

It has been already pointed out that the other series of groups, which must be regarded as of seated figures, forms the antecedent stage on a larger scale, and executed in a less mannered style than those of the Miniature Frescoes described below.[1] But these, as we now know, were already in existence in the pre-seismic phase of M. M. III *b*. It seems, therefore, that the 'Ladies in Blue' must be referred to the initial phase, *a*, of M. M. III.

The occurrence of these fragments among the debris of the old West entrance passage affords itself a good illustration of the unity of style maintained throughout the building in each of its particular phases. There is evidence, indeed, that in the brilliant days of the Third Middle Minoan Period these seated groups of ladies, whose attention seems to have been divided between their toilet and conversation, had a very wide vogue on the Palace walls. They not only supplied the decorative theme of a very important section of the Domestic Quarter, but a fragment here reproduced showing the arm and part of the *coiffure* of a similarly bedecked lady was found near the fresco heaps in the North-Western region of the Palace (Fig. 431). A solitary though very remarkable specimen has been preserved, moreover, which indicates that similar scenes in low relief were portrayed in the principal hall of the West Quarter. This is the 'Jewel Fresco'—a painted fragment in low relief, brought to light in a basement on the borders of this hall,[2]—where we see a man's fingers are placing round a lady's neck a jewel, apparently attached to the corner of deep blue tartan robe. This fragment, indeed, illustrates the acme of this style of decoration.

We may infer that, as in the parallel instances, the version of the seated ladies seen in this Western Corridor belongs to the restoration that followed a great catastrophe at the end of M. M. II. It can hardly be regarded as having belonged to the original construction of the passage-way, though its general arrangement may itself have remained unchanged.

The 'Corridor of the Procession'.

The 'Corridor of the Procession': wider than preceding.

The existing Corridor which replaced that with the friezes of 'Blue Ladies' was built on a more spacious scale corresponding with the enlarged West Porch. It illustrates a distinctive feature of the new method of wall decoration generally adopted in this quarter of the Palace, in this case, apparently, after a partial catastrophe that took place in the mature L. M. I *a* epoch.[3] In place of the combination of gypsum dado and painted frieze

[1] See Coloured Plate, Vol. iii.

[2] Vol. i, p. 525 seqq. and Fig. 383. This fragment was unfortunately pulverized by the earthquake of 1926, but a good coloured drawing and cast was made by Monsieur E. Gilliéron, fils, previous to this catastrophe.

[3] See above, p. 625.

above that had prevailed in the earlier period, the whole surface of the walls, as we shall see, was now covered with painted plaster, and full-length figures were preferred to seated.

Frescoes covering whole wall.

The later Corridor, widened as described, by carrying back the wall-lines, had a central slabbing of fine gypsum answering to that visible in the Porch. A succession of five of these slabs has been preserved running South from the doorway, and forming the continuation of the entrance passage of similar slabs outside it.[1]

Adhering to the surface of the central gypsum slabs, both within and without the entrance, and to the threshold itself, which was of the same material, were found the remains of a hard white-faced stucco coating. On the other hand, the schist paving slabs of the wings showed, attached to their interstices, an equally hard cement-like plaster with a Venetian-red face. Remains of this were also seen sticking to the base of the walls along the borders of the pavement.

Processional corridor: white stucco coating of central gypsum slabs: red on schist wings.

There was evidence that the East wall of the enlarged Corridor, though containing, as already noticed, some very ancient blocks, belonged to the same epoch as the schist pavement of the wings. A large gypsum block in the upper part of the wall from the entrance being raised, it was found that the fragments of pottery in the pure element of clay mortar immediately beneath it, and in the crevices below, were all of M. M. III date, and, so far as could be made out, of the closing phase of that Period.

The use of irregular slabs of blue-green schist as the underlying material of painted stucco is itself a marked characteristic of Minoan houses belonging to the transitional era that marks the end of the Middle and the beginning of the Late Minoan Age. Good examples of this are found at Knossos itself, and in a special degree plentifully forthcoming in the 'Propaganda' house at Niru Khani.

Green schist wings of pavement covered with red-faced stucco.

[1] It is remarkable, and at first sight not easily explicable, that under the first gypsum slab raised there was a preponderantly M. M. I *a* ceramic element immediately below. The analysis of sherds was as follows: (1922, test B. 1) from immediately below it to a layer 25 cm. down 1 M. M. III, 20 M. M. I *a*, 23 Early Minoan and Neolithic. From the layer at 25 cm. (1922, test B. 2) 5 M. M. I *a*, 3 E. M. III, 36 E. M. *in genere*, 25 Neolithic. At 37 cm. down was a rough 'Kalderim' pavement. Under the neighbouring green schist paving slabs of the enlarged wings of the Corridor, on the contrary, in the first 25 centimetres, down to the layer or στρῶσις, there were (1922, test A. 1) 31 M. M. III *b* sherds, 29 M. M. I *a*, 43 E. M. *in genere*, 31 Neolithic. From 25 cm. to a plaster floor at 40 there were 32 M. M. I *a*, 22 E. M. *in genere*, 37 Neolithic. No M. M. I fragments with polychrome decoration were found in either deposit. Yet farther on in the Corridor, as we have seen, a gypsum pavement, *ex hypothesi* of M. M. III *a* date, lay at a slightly lower level beneath the later slabbing.

The processional frescoes of the walls.

Of the painted stucco decoration of the later left wall of the Corridor in its final state abundant remains were forthcoming. The painted plaster was found largely still adhering to the lower surface of the wall, but a large fragment to the North showing two youths, preserved up to their shoulders, lay face down on the Corridor pavement, and had to be raised with great precautions by means of a plaster of Paris backing. The fresco remains extended along the left wall from just inside the entrance almost continuously for a distance of about nine metres (see Sketch, Fig. 428) though, owing to the denudation of the wall itself, the heads of the figures here represented were in no case preserved, and in the central section only the feet were left, with at most the lower part of the robes. On the right side of the gallery were some scanty traces of the feet of a similar succession of human figures. For the head and the actual physiognomy of one of the men of this processional series we were indebted to the discovery of the Cup-bearer Fresco, fallen from the side-wall of the South Propylaeum. This, indeed, must be regarded as having formed part of a continuous system linking on to the figured designs in the Corridor.

West end corridor broken away.

Traces of its Eastward continuation.

Southern verandah.

Owing to the falling away of the ground, the actual remains of the 'Corridor of the Procession' break off some seventeen metres South of its entrance. The foundations, especially on the East side, continue, however, some metres farther, and at a point about 24 metres from its starting-point, it is clear that this passage-way turned East.[1] It would hence have pursued its course above a line of small basements, whose cross-walls gave it excellent support, and the evidence of its prolongation along this line was in fact afforded by repeated finds of green schist paving slabs found above the floor-levels of these basements. This section of the Corridor seems to have been flanked by a kind of verandah overlooking the line of the now derelict South Corridor and this must have greatly added to its amenities. From this outer gallery, which may recall the portico of Diocletian's Palace at Spalato, a fine view would open on the wooded defile of the Kairatos and on the peak of Juktas rising above the nearer hills. A touch of human interest could not fail to have been supplied by the sight of the arrivals by the Great South Road at the 'Caravanserai' on the opposite slope or of the travellers who continued their way over the massive viaduct below to the bridge-head

[1] It was doubtless at this point that the earlier Western entrance passage had been entered by a staircase leading up from the Porch (conjecturally restored, p. 162, Fig. 82, and cf. the General Plan A at end of volume) at the South-West Palace Angle. This Porch, however, together with the Stepped Portico that led to it, seems to have gone out of use after the great catastrophe of the end of M. M. III.

beyond and the stepped approach to the Palace from that side. The evening land breeze that throughout the summer months breathes direct on this line of the building would have made this long open gallery a specially pleasant place of resort.

State approach to S. Propylaeum, and to 'South-North Corridor' leading to Central Court.

The main objects of this State Entrance passage are clearly apparent. It afforded a ceremonial route of approach in the first instance to the South Propylaeum and its stately stepped porch above, leading to the *piano nobile* of the West Palace section. But it also continued beyond on the same line to the landing of a main staircase which brought the Southern Porch of the Palace into connexion with the South-North Corridor described below.[1] Near the point where the Corridor would have abutted on this staircase landing, there has happily been preserved *in situ* a gypsum block on its North wall with a pavement ledge showing the level of the floor here, which would have been 5 centimetres higher. This level proved to have exactly corresponded with that of the West Porch.

Pavement ledge of East section of Procession Corridor in position.

The South-North Corridor, to which the landing in question led, on the same level, afforded the principal avenue of approach to the Central Court on that side. Its importance was marked by the discovery on its Eastern border, near the point where it would have opened on the Court, of the painted bas-relief (see Frontispiece),[2] depicting what there is every reason to believe was a Minoan Priest-King, wearing a lily crown with peacock plumes.

Circuitous character of State approach.

The circuitous character of the entrance system represented by the course of the 'Corridor of the Procession' and its prolongation contrasts with what seems to have been the direct entry East of the older plan, with its axial arrangement. It must be remembered, however, that from the earliest days of the existing building the angular course of the Stepped Portico, towards what seems to have been then a principal entrance at the North-West angle, had supplied the Palace with a magnificent State approach in that direction from the bridge-head of the 'Great South Road'. Apart from this, however, a winding entrance, such as was demanded for defensive reasons in the case of primitive Acropolis sites, like that of Tiryns for instance, might well have supplied the idea of this indirect method of approach to the core of the building. It seems clear, indeed, that the architect had availed himself of such models to prolong the imposing effect of this entrance Corridor, the decoration of which, as it has been preserved to us, reflected its principal function as an avenue of processional pageants.

[1] See below, § 64.

[2] See p. 774 seqq.

§ 62. The 'South Propylaeum', Earlier and Later, and 'Cupbearer Fresco'.

Winding approach to S. Propylaeum—its entrance system; Sub-oval column-bases; Earlier and later Propylaea; Spurs of cross-walling; Central steps and tarazza *pavement—probable Clerestory; Green slate pavement of wings; The inner section—second pair of column-bases; Broader plan of earlier Propylaeum; Comparisons with Troy, Tiryns, &c.; Anatolian derivation, but 'Mycenaean' type imported from Crete; Remains of sculptured rosette band from earlier portal—M. M. III a date; Knossian decorative reliefs copied at Mycenae; Iron-stone pavement and marbled dado of earlier Propylaeum; Large built Cist beneath its floor-level; Painted plaster decoration of interior of Cist; Filled in after M. M. III earthquake; A Treasury of a Shrine—faïence figures; Wings of earlier Propylaeum railed in: Its painted stucco decoration as 'Ladies in Blue'; Later Propylaeum narrower —more rubbly walls; Painted rosette frieze; Discovery of 'Cup-bearer Fresco'—elongated 'rhyton' type; Costume and ornament of figure; Agate bead-seal and silver ornament in front of ear; Conventionalized upper rock border; A second figure in front; 'Mediterranean' type of 'Cup-bearer'; Overwhelming impression produced by first discovery—the 'Saint'; Double range of figures—eighty-eight in hall of Propylaeum; Replica of figures replaced in former position in restored West wing; Frescoes a record of religious processions—sacred vessels of Treasury Cist exhibited; Foundations of bastion supporting steps to upper Porch; Displaced column-base; Gypsum jamb of entrance; Conjectural* loggias; Tarazza *pavement of Upper 'Long Gallery'—limestone jambs of two upper Magazines; 'Porter's Lodge'; Lobby of principal, Tri-columnar Hall of West Palace Section.*

Winding approach to S. Propylaeum.

The Southern Section of the 'Corridor of the Procession', running East (see General Plans, A and C, at end of volume), approached the system of entrance halls that led up to the *piano nobile* of the Palace. It entered this section through an elongated open space, 9·38 metres in width, which contained plentiful remains of its *tarazza* paving.[1] This light-area gave

[1] In the Eastern section of this light-area the explorations of 1926 brought out fragments of painted stucco, showing parts of squares of black and red, apparently imitating the variously coloured slabs of a marble dado and recalling those of the West Porch. These belong to some restoration of the last Palace period (L. M. II).

FIG. 432. ENTRANCE JAMBS AND SOUTHERN COLUMN-BASES OF SOUTH PROPYLAEUM AS EXCAVATED : STEPS TO NORTHERN SECTION PARTLY RESTORED.

access through triple door openings to the lower hall of the Southern Propylaeum, the exploration of which—only completed after a long series of supplementary researches[1]—has led to some highly illuminating results. It may be safely said that hardly any area throughout the Palace site surpasses this in interest, and the elements for the ideal reconstruction of the building that it presents, both in its earlier and its later form, have proved abundantly forthcoming.

Its entrance system.

Two jambs and side blocks of the Eastern portal—controlled from within—still remained in position (see Fig. 432), and, allowing for a doorway of the same dimensions on the West side, space is left for a wider central opening, in conformity with the broad espacement between the two column-bases beyond. This arrangement, now restored, is shown in the Plan, Fig. 434, where the doorways leading into the fore-court from the 'Corridor of the Procession' are made to correspond. The width of the central portal in both cases would have been about 2·30 metres, and, when the doors were open, a splendid vista would have been revealed of the rising steps and bastions of the upper portico beyond, as seen through the central hall of the Propylaeum with its twin pairs of columns and its richly decorated walls on either side (see below, p. 711, Fig. 445). The central space contained considerable remains of *tarazza* paving, such as it is usual to associate with open spaces. On the other hand, the general plan of the structure and the fact that the central steps within were of gypsum suggest that it was roofed over. We may perhaps infer that, as in other cases—the lustral basin, for instance, by the 'Room of the Throne'—there had been some kind of lantern or clerestory above. It is hard to understand, indeed, how without some such arrangement the frescoes in the side-bays could have received sufficient light.

Probable Clerestory.

Sub-oval column-bases.

The two column-bases of the Southern section of the Propylaeum stand 1·40 metres beyond the row of doorways. They are so placed that, though leaving an opening of about four and a half metres for the central gangway, they approach within 1·50 metres of the side-walls. The circumference of these is slightly oval, the major axis being in line with the side-walls—a particularity well marked in some early column-bases at Phaestos and elsewhere. Thus the gypsum base to the left, the original dimensions of which can be accurately ascertained, was 96 centimetres from N. to S. by 88 from E. to W. It had a squared base, answering to typically M. M. III form, of which good examples have been preserved in the Palace,

[1] These supplementary researches made in 1925 and 1926 were largely necessitated by the fact that the original excavation had been mostly only carried down to the *tarazza* floor level on which the *pithoi* stood and which really belonged to the period of Reoccupation.

including those above the pillars of the early crypts of the Western Section and the great gypsum base of the West Porch.

Taking the mean diameter of this base as 92 cm., the height of the columns according to the usual Minoan system would have been about 4·60 metres.

The Eastern column-base, which has a good deal suffered, is of limestone. It is set too high, and slightly out of position, and is made up on one side with patchwork fragments, but, like the other, it had originally a square base, and it must be practically coeval with it. Its later setting was doubtless due to the reoccupation of parts of this area, of which there is considerable evidence. There are traces of a later *tarazza* floor, about 20 centimetres above the M. M. III *b* pavement, and remains of L. M. III *pithoi* were ranged on this against the earlier walls on both sides of the Propylaeum (Fig. 433).[1]

FIG. 433. GROUP OF LATE *PITHOI* IN N.E. ANGLE OF PROPYLAEUM.

The disproportionately narrow intervals between the bases and the side-walls as compared with their espacement as regards each other is explained by the clear evidence that the original plan of the Propylaeum was broader (see Plan, Fig. 434, and compare Fig. 435, *b*, *d*, below). Its lateral walls have, in fact, been preserved, with the inner faces in each case about two and a half metres farther from the respective column-bases than in the later arrangement. The column-bases themselves may be taken to have remained practically *in situ*, and represent as already observed an early M. M. III type.

Earlier and later structures.

A very interesting illustration of the vicissitudes of the Palace is afforded by the contrast between the structure of the outer walls of the earlier and later Propylaeum. The original side-walls are thicker and formed almost entirely of blocks of stone, some of them showing signs of having been used in the earlier constructions, but generally fairly entire. They were derived from the M. M. I Palace fabric after the considerable destruction at the close of M. M. II. But the side-walls of the Propylaeum

[1] Remains of eleven were found along the N. section of the E. wall and five in the S.W. angle formed by the spur of walling on the West side, some on a roughly built base. The removal of the corresponding Eastern spur was probably due to this agency. Some of the *pithoi* are very late (L. M. III *b*), but one or two may be of L. M. II *b* fabric taken from the Palace Magazines.

as rebuilt with shrunken dimensions tell a very different tale—a tale indeed constantly repeated throughout the Palace area. If the M. M. III walls were already to a great extent compounded of the ruins of earlier structures the rubble material of this later fabric represents the ruin of a ruin. Most of its stonework consisted of much smaller and fragmentary blocks, largely supplemented by clay mortar, and the cohesion of its surface was greatly due to the fine stucco coating with which it was overlaid, and which was covered with brilliant painted decoration of the same kind as the 'Corridor of the Procession'. The relative date of these later walls was, at the same time, fully established by the Cist containing only M. M. III *b* sherds which, as we shall see, ran under the East wall.

Spurs of cross-walling.

From the centre of the West wall a cross-wall ran out, the terminal section of which corresponded with the position of the column-base to the South. This wall, in its existing form, was a late restoration, but supplementary excavation showed that it rested on earlier foundations. These foundations, moreover, were traced in a direct line to the East wall, affording evidence of the original existence of a corresponding spur of cross-wall running out from that side. On the other hand, the rubble support, 4·47 metres wide, that linked these cross-walls pointed to the existence of a couple of broad steps at this point. This indication was confirmed in 1926 when a part of a broad gypsum step, 1·60 metres long, was found overlying the Eastern border of the neighbouring filled-in cist described below, which had evidently formed part of the lower of these central steps.[1] Another piece was subsequently found. Owing to the decided rise of the ground level steps were required here in addition to the gradual slope of the *tarazza* pavement of the central part of the hall, continued throughout its Northern Section.

Central steps.

The partly artificial hill on which the Palace was built had in this part sloped somewhat steeply down on its Southern side, and it had been necessary for the support of the upper terrace on which the Propylaeum stood to pile up great masses of rubble stones, which were contained below by the massive limestone blocks and huge timber balks at the back of the inner gallery that lay behind the South Corridor as it originally existed. In the early part of the excavation a trench had been dug into this along the middle part of the floor of the Propylaeum, and it was found that the whole of its front section rested on this stone filling.

Green slate pavement of wings.

In the wings of this Section, especially that on the West side, were considerable remains of green slate slabs, identical with those preserved on each

[1] It is possible that this, like the column-bases, was an inheritance from the M. M. III structures.

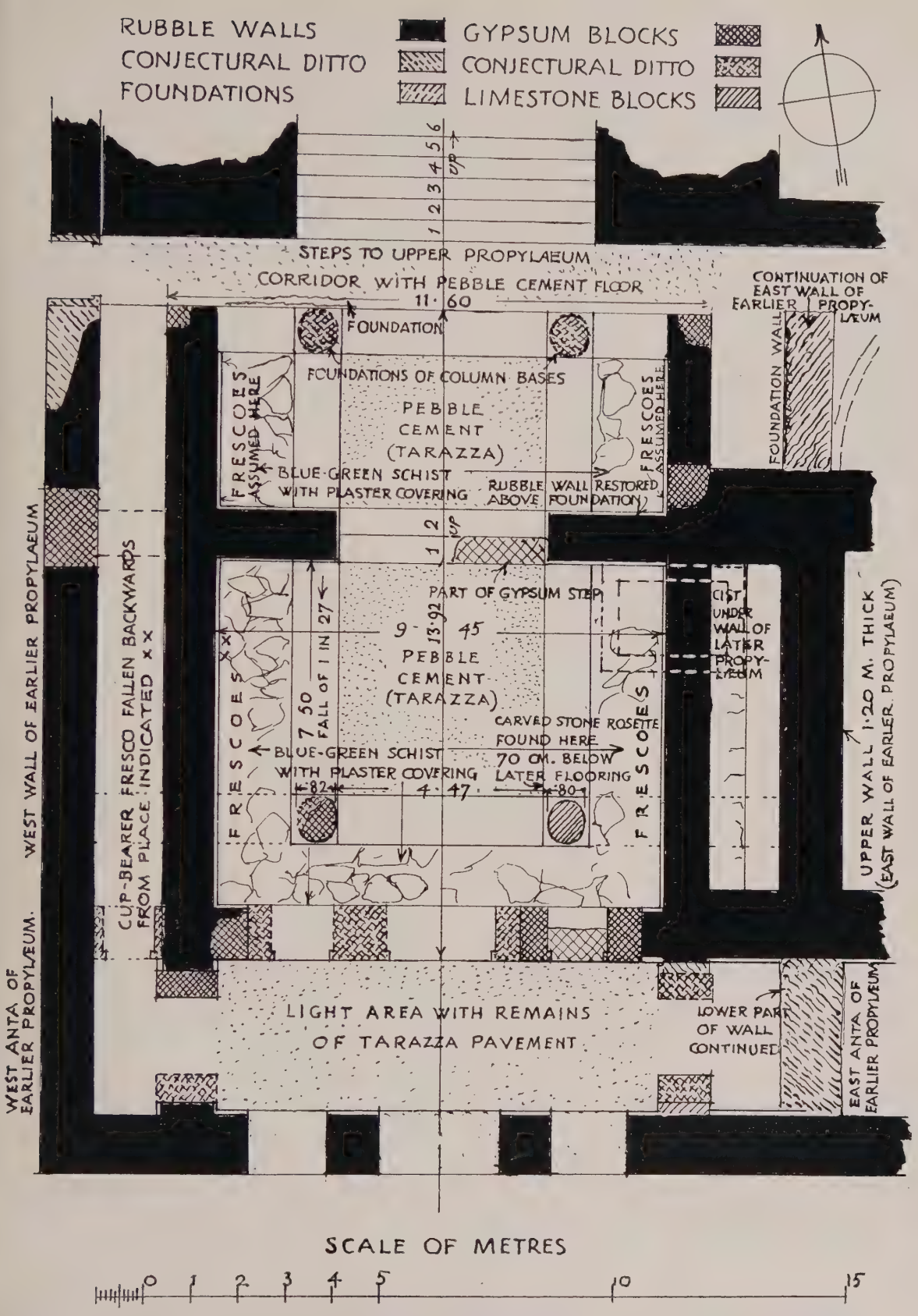


FIG. 434. PLAN OF SOUTH HALL OF SOUTH PROPYLAEUM SHOWING WALL-LINES OF THE EARLIER STRUCTURE BEYOND ITS SIDE-WALLS.

side of the central gypsum pavement of the 'Corridor of the Procession', and this, as in the latter case, had been doubtless covered with red plaster. This pavement bordered externally the stylobate line running N. and S. which was probably of gypsum, now disintegrated.

Northern section of Propylaeum.

The Northern Section of the Propylaeum was only about half the length of the other —as measured from the central spurs to the exterior line, 4·30 metres compared with 8·50. Its interior arrangement, including the system of wall decoration, was doubtless the same as that of the Southern Section. No superficial remains were preserved in the space between the ends of its side-walls, and the completion of the system on its North borders had remained uncertain. The good results of the exploration of traces of foundations in other parts of the site led me, however, in 1926, to make excavations at two points where it seemed likely that column-bases had once stood. The work, carried out by our foreman, Ali Baritakis, who had acquired great skill in this kind of investigation, proved entirely successful. In both cases small flat slabs and rubble masonry were found resembling those that underlay the two column-bases of the Southern Section of the hall.

Second pair of column-bases.

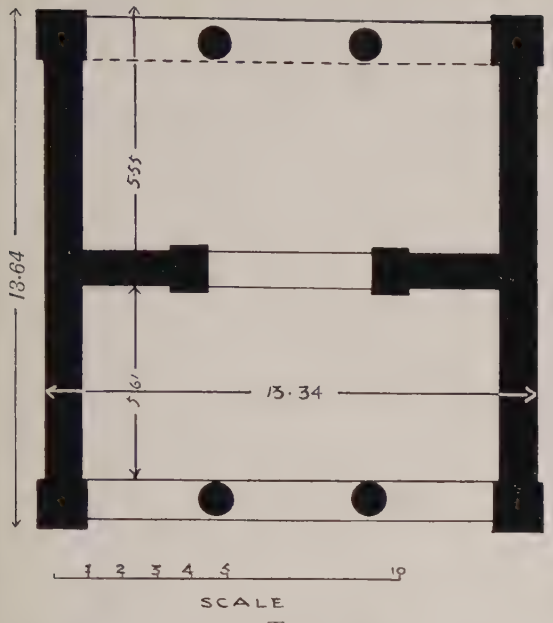
These remains on the East side, moreover, were partly covered with charcoal, probably derived from the original wooden shaft of the column, and which had made its way down when, for whatever reason, the base was removed. The column-base on the West side has been restored in the sub-oval form and with the same rectangular base as the gypsum example on the South front.

The proof thus afforded that two column-bases originally stood on the North border of this area, answering to those on the South, is itself of great comparative interest. The plan, with the bi-columnar arrangement at both openings, bears a close analogy to the two Propylaea at Tiryns (Fig. 435, *c*), though the outer line of doorways was wanting in those cases. The remains of the North-West Propylon at Mycenae[1] are unfortunately too incomplete to admit of restoration, but the large conglomerate bases found in association with it show, at any rate, that it belonged to the columnar class. That this massive work formed part of the early Palace on that site may be reasonably assumed, and in that case it would go back approximately to the same date as the earlier Propylaeum at Knossos, equated with M. M. III *a*.

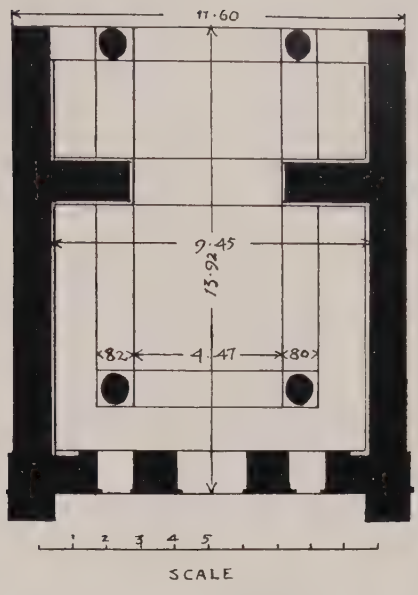
Broader plan of earlier Propylaeum.

The two Propylaea at Tiryns are nearly square, the exterior width of the inner one being about 11 metres as against 11·80 metres in the case of the later Propylaeum at Knossos, which had, however, a length of about 14·50 metres. Further investigations, undertaken in 1926, have made it possible to complete the plan of the earlier Propylaeum at Knossos. A small

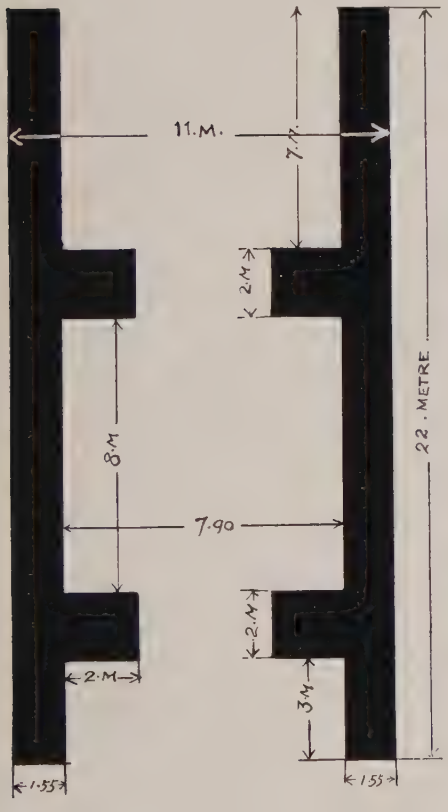
[1] See Wace, *J. H. S.*, xxv, pp. 210, 211.



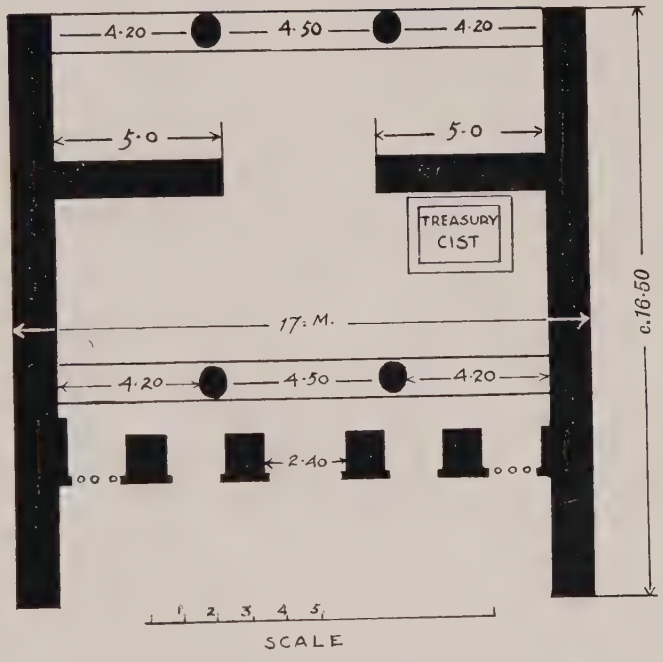
c, Tiryns.



d, Knossos ii.



a, Troy.



b, Knossos i.

Fig. 435. Comparative View of Plans of Propylaea: *a*, Troy; *b*, Earlier Structure at Knossos; *c*, Tiryns, Outer Propylaeum (Spurs slightly completed); *d*, Later Structure at Knossos.

excavation was successful in bringing out the clay and rubble stone bedding of the destroyed North end of its East wall. It may be assumed that the column-bases were really taken over from the earlier structure, the total exterior breadth of which was about seventeen metres, as against about the

FIG. 436. FRAGMENT OF ROSETTE BAND, SOUTH PROPYLAEUM. ($\frac{6}{21}$)

same depth—in other words approximately seventeen metres square. These proportions are decidedly larger than those of the outer Propylaeum at Tiryns which is about 13·50 metres square.[1] (Compare Fig. 435, *b*, *c*.)

Comparisons with Troy, Tiryns, &c.

This more or less square plan—like a capital H, with an interrupted cross-bar—is of great interest from its manifest correspondence with an entrance system, probably of very ancient origin, of which we find traces over a wide Anatolian region. It answers to the primitive outline of the South-East and South-West gates of the Second City of Troy[2] and recurs

[1] Dörpfeld's measurements are 13·34 m. broad by 13·64 m. deep.

[2] See Dörpfeld's plan of the citadel of Troy in *Troja und Ilion*, ii, Pl. II. The South-East Propylon there (Fig. 435, *a*) is specially important in the present connexion since it is axially directed towards the principal Megaron (A).

at Sindjirli and elsewhere in the old Hittite regions. It will be seen, moreover, that at Troy the H-shaped Propylon abuts on the actual gateway in the walls (Fig. 435, *a*), so that the outer line of doorways in the Knossian example really represents a survival of the primitive arrangement.

It appears that, according to the Trojan type, Fig. 435, *a*, two *antae* ran forward beyond the line of the entrance opening, and of this, again, we may recognize a tradition in the plan of the earlier Propylaeum at Knossos. The West wall of this ran South 3·30 metres beyond the line of the doorways, the *anta* thus formed being visible above ground. Supplementary excavations made in 1926 further showed that the lower courses of the East wall ran forward in a similar manner, thus supplying the corresponding *anta*. As at Troy, moreover, these projecting walls flanked an open area. Plans of the South Propylaeum at Knossos in its earlier and later shape are given in Fig. 435, *b*, *d*, together with the South-East Propylon of Troy (*a*) and the outer of the two Tirynthian structures (*c*) for comparison.

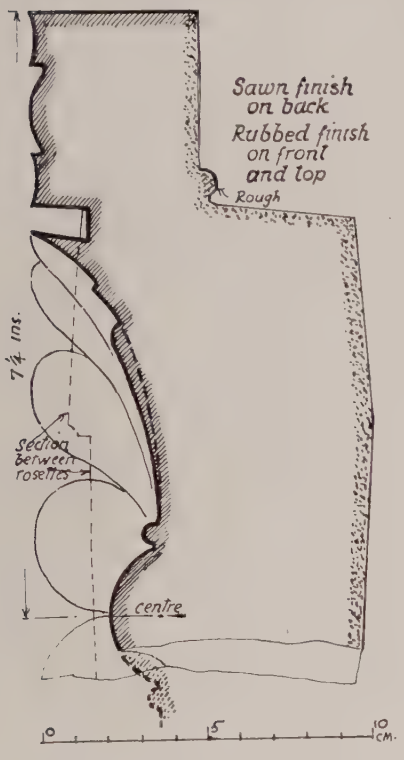


FIG. 437. SECTION OF ROSETTE. THEODORE FYFE.

It is impossible to doubt that the Propylaeum must be reckoned among the palatial elements introduced into Crete from Anatolia. At the same time the evidence of Knossos, supplemented by that of Tiryns and Mycenae, shows that the Minoans, while taking over the general plan from that side, added decorative features of their own. The favourite arrangement of two columns between *antae*, seen in a series of Minoan buildings, was worked in, together with the ornamental elements that were the peculiar property of Minoan architecture. It will be seen that the Tiryns plan was not directly taken from Anatolia, but represents the typical bi-columnar form of Minoan Crete.

Anatolian derivations; but 'Mycenaean' type imported from Crete.

A fragment of 'half-rosette' and triglyph band, carved in strongly undercut relief on dark grey limestone, was found in the North-West Propylon at Mycenae.[1] Both the fine style and the 'tongue' with parallel

[1] *B. S. A.*, xxv, pp. 236, 237 and Fig. 47 *a*; cf. p. 210 (see above, p. 596). The original

†

bars, from which petals of the half-rosette spring, are features that recur on the façade of the 'Atreus' Tomb [1] and are common, as we have seen, to similar works at Knossos.

Remains of rosette band from earlier portal.

The association of a decorative band of this class with the portal of the North-West Propylon at Mycenae finds an interesting pendant in a discovery made immediately to the North-West of the Eastern column-base of the Propylaeum at Knossos. Here, beneath the M.M. III *b tarazza* pavement, at depth of 70 centimetres, was found the magnificent fragment of a rosette executed in a brownish-like stone with fine graining, reproduced in Fig. 436. The deepness of the undercutting, and the exquisite character of the technique, is best shown by Mr. Theodore Fyfe's Section, Fig. 437.

It was surmounted by a cornice, repeating the same characteristic combination of a bossed central band with two in cavetto, of which examples have been given above from fragments found in the area fronting the original South-West Porch,[2] and, again, in connexion with the North-West Corner Entrance.[3] The rosette itself, which, as restored, has a diameter of 24 centimetres,[4] must have formed part of a magnificent architectural border surpassing in execution any reliefs of the kind found at Knossos or elsewhere. Further fragments of this band, some of a green-grey stone, were found in the neighbouring area under the same stratigraphic conditions.

M. M. III *a* date.

The position of the remains of this beautiful rosette band sufficiently shows that it had belonged to the older Propylaeum, and there can be no hesitation in regarding it as having formed part of the original construction, dating from the earliest phase of the Third Middle Minoan Period.

Attention has already been called to the discovery of other fragments of rosette bands of the same exquisitely modelled and undercut fabric in the area of the early South-West Porch, where it was found in association with other contemporary reliefs of triglyph friezes with half-rosettes and a spiral border.[5] Other pieces of similar rosettes were found, as already noted,[6] a little East of the West Porch, and there is every reason to believe that it had formed part of its original decoration. There are indications that in all these cases such rosette bands may have surrounded the great portals, and such an arrangement has long been proposed for the restoration of the façade of the

height of the half-rosette relief was apparently about 20 cm.: which is about the restored height of a similar half-rosette fragment from the area of the 'South-West Porch'.

[1] Perrot et Chipiez, *Grèce Primitive*, p. 628, Fig. 277.

[2] See p. 163, Fig. 83, and p. 166, Fig. 84.

[3] See above, p. 591 seqq. and Figs. 368, 370.

[4] The total width of the band was 36·5 cm.; that of the borders 6 cm.

[5] See above, p. 163 seqq.

[6] See p. 671.

'Atreus' Tomb at Mycenae where remains of similar rosette reliefs occurred. A true analogy has, indeed, been supplied by the painted band of rosettes round the doorway of a rock tomb explored there by Tsountas,[1] which is clearly based on such a stone-work model. It will be seen below that very interesting examples of this later imitation of rosette bands in painted stucco decoration occurred in the Propylaeum itself.

Knossian decorative reliefs copied at Mycenae.

Of the bearing of this collective group of architectural reliefs on the chronology of the parallel sculptures of the façade of the 'Atreus' Tomb at Mycenae, it is hardly necessary to enlarge. They repeat the same models down to the minutest details, and are executed in an identical technique.[2] The material used was, at times at least, apparently the same Cretan stone, and it is safe to say that the work was executed by craftsmen trained in the same school as those who adorned the entrance halls of the Great Palace. It was, in fact, a lapidary school instructed from the earliest days of Minoan civilization by Egyptian models and which had inherited the technical processes of Egyptian masters. The Minoan craftsmen had been able from a much earlier date to attack the hardest materials—such as liparite, for instance—with fine saws and drills, and, it would seem, a gouge-like instrument, for their fine cavetto bands.[3]

For the conventionalized rosettes themselves ceramic parallels exist belonging to the finest polychrome stage (M. M. II *a*). The lower part of a cup of 'egg-shell' ware, already illustrated,[4] is made to depict a calix of of this kind—compared above to a water-lily floating on the surface of a pool—the petals of which show rounded ends with an inner finely stemmed outline answering to that seen in the rosette reliefs. We find, indeed, a still closer analogy in the steatite 'blossom cups' of somewhat later date,[5]

[1] Ἀρχ. Ἐφ., 1888, Pl. 1.

[2] In my *Ring of Nestor, &c.*, pp. 45 and 74 (*J. H. S.*, 1925) I have already pointed out that a series of stone vessels found in the 'Atreus' Tomb and the closely related 'Tomb of Clytemnestra' are characteristic fabrics of the Third Middle Minoan Period. Inside the latter tomb were found remains of steatite jars, resembling the 'Medallion' *pithoi* of the Knossian Palace, together with fragments of stone ewers with decoration analogous to those from the M. M. III *a* deposit in the N.W. Lustral Basin (*P. of M.*, i, p. 412, Fig. 296). So, too, in the *dromos* of the 'Atreus' Tomb there occurred the constituent parts of several stone bowls with grooves and circular holes for inlay, found in that area and elsewhere in the same M. M. III association (*ibid.*, i, p. 413, Fig. 297). There is also evidence of the existence of great stone *pithoi* of M. M. III date in the Knossian Palace.

[3] These are not confined to architectural cornices, but occur at times, especially in M. M. III, in the decorative features of vases such as those with plait-work pattern. A fragment of a liparite vase, probably of this date, shows spiral bands with a slight cavetto.

[4] *Ibid.*, i, p. 241, Fig. 181.

[5] Cf. p. 310, Fig. 181.

where the characteristic reduplication of the upper contour of the petals also appears. That in these cases we have to do with a suggestion derived from Egyptian lotus cups may be reasonably inferred, and the rosette pattern of the reliefs may well have been also derived from Egyptian models. But the artistic evolution and architectural setting are purely Minoan.

Iron-stone pavement and marbled dado of earlier Propylaeum.

In the case of the early Propylaeum we have plentiful evidence that finely wrought stone-work of other kinds decorated its walls and pavements. In close association with the rosette fragments beneath the floor-level of the later Propylaeum, as well as in the cist beneath the later wall described below, occurred thick fragments of paving slabs of a close-grained grey iron-stone with a finely levigated surface. This is the 'almond-stone' or ἀμυγδαλόπετρα

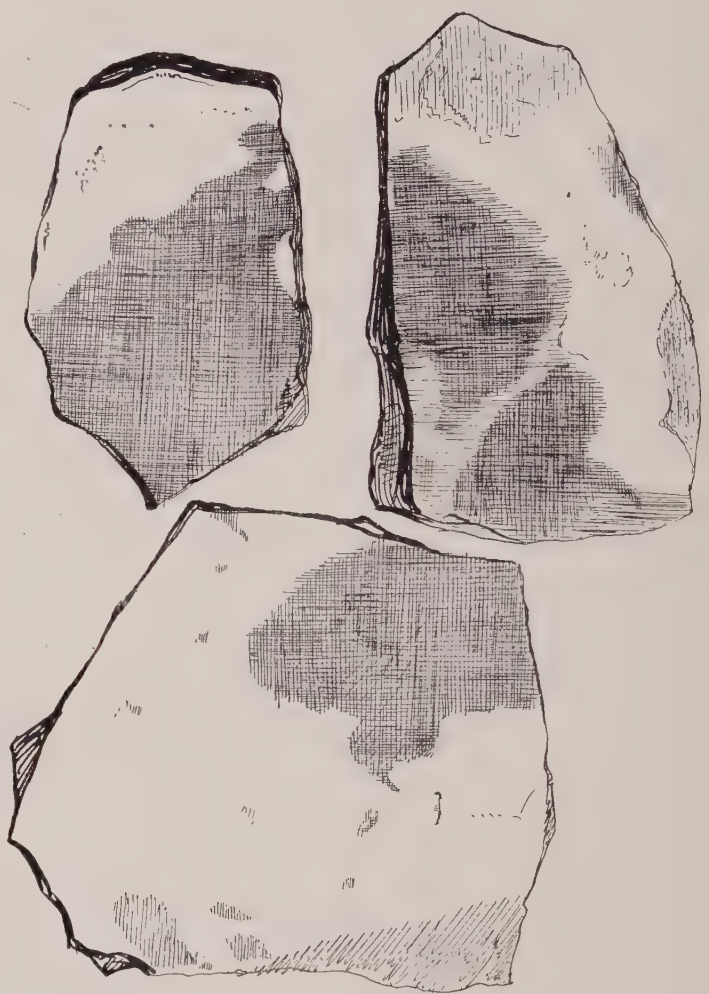


Fig. 438. Fragments of Dado Slabs of Finely Grained Stone with Polished Marble Surface: Earlier Propylaeum.

to which reference has already been made,[1] as the material on the polygonal pavements with red plaster interstices—the 'mosaiko' of our Cretan workmen—that seems to have come in about the close of M. M. II, and is very

[1] See especially *P. of M.*, i, p. 211. The disadvantage of this stone is the great tendency it has to break up into more or less quadrangular pieces. This is well illustrated by the present state of the pavement of the North-West Portico which was paved with this material (*ibid.*, p. 422).

characteristic of the earliest phase of M. M. III. Its presence here has therefore a particular bearing on the date of the earlier Propylaeum.

Belonging to the same stratigraphic horizon, and especially frequent in the last-named receptacle, were also pieces of plaques of what, seen in section, was a finely grained grey stone, but which had been split at the quarry along thin white veins giving it a milk-white surface, varied by patches where the darker body of the material showed through, and subsequent polishing had given this the appearance of white marble mottled with blue grey (Fig. 438). A large fragment found near the base of the Western cross-wall showed a square edge slightly bevelled back, and it seems a fair conclusion that these fragments had belonged to the dado slabs of the earlier Propylaeum.[1] In these remains we have a valuable indication of the much greater part played by stonework in the decoration of the walls and floors of the Middle Minoan Palace.

The best preserved specimens of these plaques, and our precise knowledge of their chronological place, are due to a remarkable discovery made in the course of an exploration beneath the floor of the N.E. corner of the first section of the later Propylaeum. This brought to light the border of what proved to be a spacious stone-built repository, analogous to those of the Central Palace region containing the relics of the Shrine of the Snake Goddess.[2]

Large built Cist beneath floor-level.

The outer walls of this great Cist were about 38 centimetres thick, and the depth within—a metre and a half—corresponded with that of Temple Repositories.[3] The length and breadth, however—2·35 m., 1·60 m.—exceeded that of the larger of these, that to the East,[4] in the proportion of about 4 to 3. The construction, of ashlar blocks, is shown in Mr. Piet de Jong's drawing in Fig. 439, and the plan and section there given. The individual blocks in this case were much shallower than usual in proportion to their length, and were left with wider intervals between the courses for clay and clay mortar. The bottom of the Cist consisted of two carefully hewn slabs with a somewhat broad interval between. These rested on a bedding of clay mortar with a layer of 'kouskouras' and stones beneath it, and below this again was the stratified Neolithic. Out of this, too, the pit for the Cist had also been cut, with a space round filled with packing materials.

The intervals between the blocks were filled in with the blue-grey

[1] The greatest thickness of these plaques was about 3·5 cm.

[2] *P. of M.*, i, p. 463 seqq.

[3] The Western Repository is 1·50 m. deep, the Eastern 1·52 m. (see *P. of M.*, i, p. 467, Fig. 335 A).

[4] The Eastern Repository is 1·90 m. × 1·43 m.

impermeable clay, already referred to, known as λεπίδα,[1] leaving, however, a superficial groove between the blocks for the clay mortar backing of

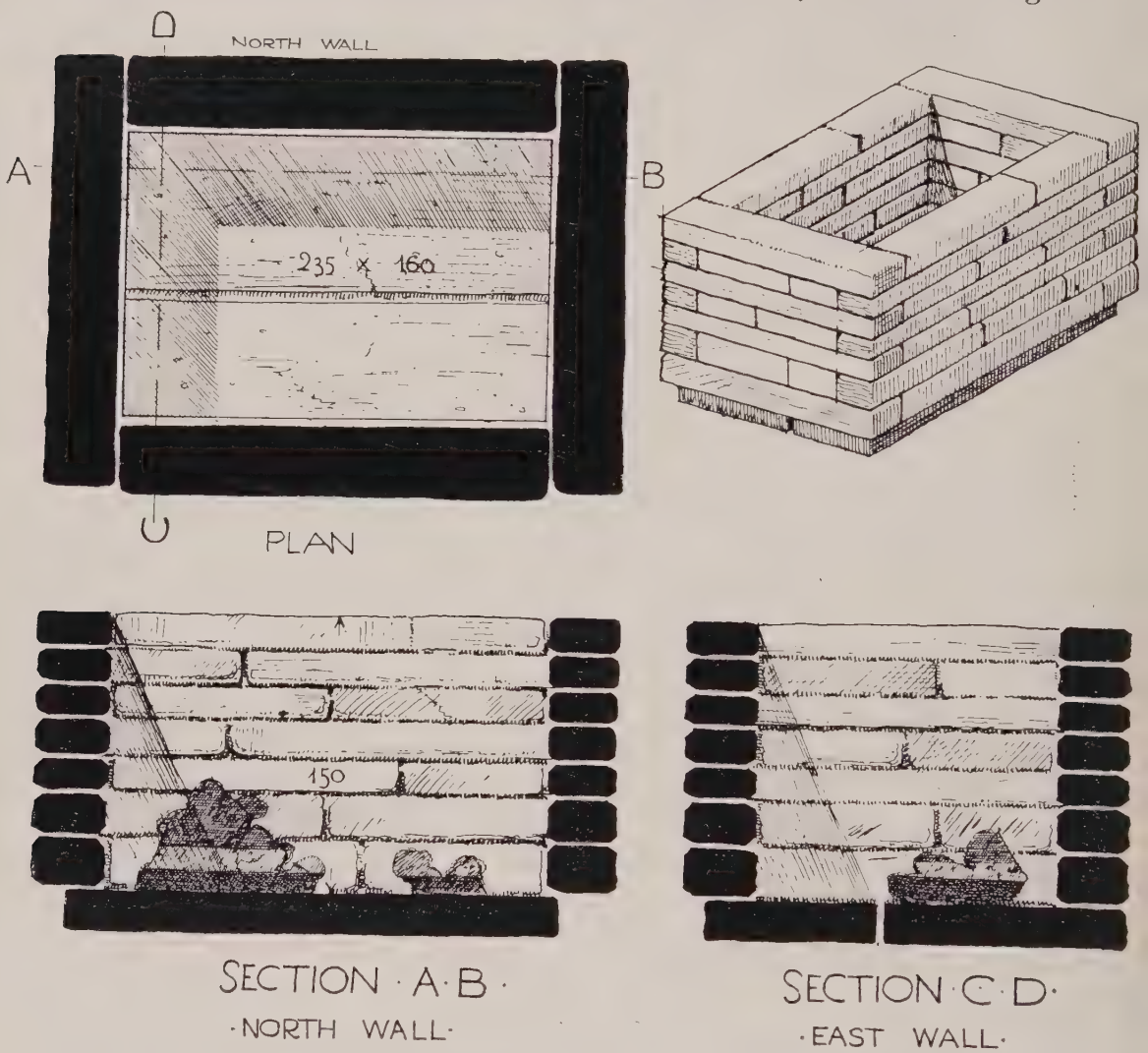


FIG. 439. LARGE CIST BELONGING TO EARLIER PROPYLAEUM WITH PAINTED STUCCO DECORATION INSIDE (PLAN, PERSPECTIVE DRAWING, AND SECTIONS: BY PIET DE JONG).

a stucco lining showing a painted face, of which numerous detached remains were found. This painted stucco facing, which is unexampled

[1] See above, pp. 327, 328, Fig. 185, B.

in any similar cist or *kasella*, is seen—partly replaced—on the face of the blocks in Sections A–B and C–D,[1] though it was too much broken up to admit of any complete restoration.

Painted plaster decoration of interior of cist.

The interior of the Cist had been coated throughout with a layer of this painted stucco. Its surface was of a deep Venetian red with yellow ochre bands veined with reddish brown so as to imitate woodwork, a frequent form of fresco decoration,[2] at times with a structural significance. The lime plaster—which is of a by no means clean white—has an average thickness of from 20 to 25 millimetres, but in places it attained a greater thickness and bulged out behind to get a good hold of the broad crevices between the masonry. Its surface was rounded where it reached the bottom—which it also covered. This painted plaster decoration of the inside of a repository, hitherto unparalleled on the site, points to the value attached to its original contents. It may be taken to show that the Cist had a removable cover and was at times left open for the inspection of the treasures within.

The great Cist itself ran close to and parallel with the projecting cross-wall on that side and, as is shown in Fig. 434, passed right under the Eastern wall of the later Propylaeum, so that in order to render safe the full exploration of its interior the overlying wall section had to be supported by a pier.

Filled in after M. M. III earthquake.

The pottery found in the interior of the built Cist was overwhelmingly representative of M. M. III, a good proportion clearly belonging to its closing phase (M. M. III *b*).[3] There also occurred a certain number of pieces dating from the earlier half of the Middle Minoan Age and a few Early Minoan and Neolithic pieces.

The deposit on the whole must be regarded as material dumped into the cavity in order to lay the foundation of the new West wall, which, together with the rest of the later structure, is thus shown to form a part of the great rebuilding that took place on the site of Knossos after the wide-spread catastrophe towards the close of the Third Middle Minoan Period. The construction of the Propylaeum in its later form thus corresponds, as

[1] The plaster itself, even in its upper layer, was coarse and of a somewhat muddy hue, contrasting with the pure white texture of this material at the beginning of the Late Minoan Age. It contained numerous small pebbles. Apart from the clay backing, it was about 3 cm. thick.

[2] See *P. of M.*, i, p. 59 and Fig 19.

[3] The analysis of the pottery examined (1925 II *a*) was as follows: a few Neolithic and 5 E. M. pieces; M. M. I, 25; M. M. II, 9 and a mass of M. M. III. As intrusive elements derived from superficial disturbance must also be mentioned some fragments of a Late Minoan *pithos* and two painted L. M. I sherds.

already pointed out, with that of the later entrance Corridor from the West Porch, marked by the remains of the 'Procession Fresco'.

Treasury of a shrine: faïence figures

From its general analogy with the Temple Repositories already described, this built Cist may well be referred to the beginning of M. M. III, and we may conclude that it contained precious vessels and other relics belonging to the treasury of a shrine actually located in the East wing of the earlier Propylaeum. A hint, indeed, of the existence on this side of the original Propylaeum of some kind of internal shrine is supplied by a discovery already made during the excavations of 1900.

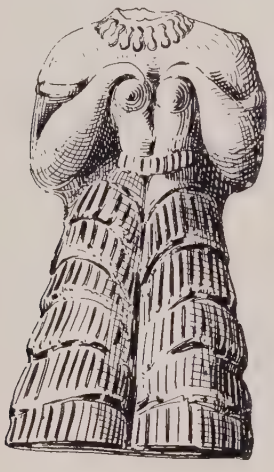


Fig. 440. Faïence Figure found with 3 Others of Earlier Propylaeum by East Entrance.

On the terrace edge South of this just by the Eastern outer *anta* of the early Propylaeum were brought out four small female images of faïence with a brown glazed surface, contemporary works no doubt from the same Palace factory that had supplied the figurines of the Temple Repositories (Fig. 440). They wore the usual flounced costume, and their hands are laid (exceptionally) above their breasts in the attitude of a Mother Goddess. Their heads were wanting, and the backs of the images are flat, showing that they were applied to a level surface. Near them was the end of a bronze sword and a bronze figure of a youth, belonging to the votive class. Just North of the Propylaeum, and perhaps originally belonging to the same deposit, occurred a small fragment of a steatite 'rhyton' with a part of a relief showing a section of the bent legs of a bull,[1] evidently belonging to a scene of the 'Vapheio' cycle.

Numerous fragments of 'marble' plaques included in the filling of the great Cist as well as others similar found beneath the surface level on the West side of the later Propylaeum supply a striking illustration of the interior decoration of the older structure. These were mostly about 12 millimetres thick, and may, as suggested, have belonged to an original marble dado, the prototype of the painted stucco imitations such as that found near the 'Labyrinth' fresco on the Eastern Palace border.[2] Other fragments were about three times this thickness, and must have served some other purpose. Though the section looks like ordinary grey limestone the surface of the

[1] Illustrated in *P. of M.*, i, p. 688, Fig. 507.

[2] *Ibid.*, i, p. 356, Fig. 255. In this case the painted stucco design imitates the veins of fine alabaster.

plaques, as already noted, was mostly of a beautifully polished white, like the finest marble with dark veins and blotches (see Fig. 438).

Wings of earlier Propylaeum railed in.

The fragmentary remains of what appears to have been a threshold block of gypsum belonging to the Eastern entrance of the first section of the hall, which had been used in a later structure near by, throws an interesting light on the interior arrangement. Though much decomposed, it showed borings clearly intended for the ends of upright bars, perhaps of bronze, and indicating that the entrance had been blocked by a railing, in the same way as the spaces between the piers and columns bordering the Central Court of the Palace at Mallia. Very probably a similar railing had also closed the Western entrance, as suggested in the Plan, Fig. 435, *b*, and the two bays of the broad entrance hall were in this way secured from being mere passage-ways. The position of the treasure cist within the Eastern bay would thus have greatly gained in convenience.

Its painted stucco decoration as 'Ladies in Blue'.

With its wide architrave above and fine architectural reliefs, its red-veined 'mosaiko' pavement and marbled dado, and the shrine that seems to have stood within its Eastern entrance bay, the earlier Propylaeum must have presented a varied and magnificent appearance. From a stucco fragment found near the South end of its Eastern wall it would seem to have had the same system of painted decoration above the dado as has been shown to have existed in the contemporary entrance passage that preceded the 'Corridor of the Procession', and which stood in organic relation to it. Although the colours had been obliterated on the face, this plaster fragment shows the same flat slightly bevelled edge below for application to the upper border of dado slabs that recurs on several fresco fragments from the earlier Corridor.[1] The subject of the painted designs there was, as has been shown above, closely analogous to those from a hall on the East side of the Palace, presenting groups of the 'Ladies in Blue'.

Later Propylaeum narrower.

It would be easy, at a superficial glance at its existing remains, to set down the later Propylaeum, built out of the surrounding debris after the great earthquake, as a work of the Decadence. The walls are somewhat narrower, constructed almost entirely of rubble masonry, and its whole proportions have shrunk. Massiveness was given up for economy of effort, severity for lightness. In place of the deeply cut bands and friezes of stone-work, implying months of artistic labour, there is every indication that we have now to do with painted stucco substitutes. Signs of haste we may well recognize, but we should not be justified in regarding this or other parts of the restored Palace as affording proof of a falling off in the builder's

Its walls more rubbly.

[1] See above, p. 679 seqq.

craft. The remains of the surrounding houses, about which something has been said in the preceding Sections, evidence, on the contrary, a brilliant outburst of architectural activity at this epoch of a kind for which there has been no parallel in the Island before or since. A *tabula rasa* was in that case made of the smaller pre-existing dwellings, and a free use was made of the finest ashlar masonry, while all kinds of skilful and novel adaptations concerning the water-supply, drainage, and lighting of these private houses were introduced. In the case of the restored Palace, the same technical improvements must have been available, but special conditions were naturally imposed on the building by the masses of chaotic ruins that encumbered the site, especially in the Western quarter.

It is possible, as above suggested in the case of the 'Corridor of the Procession', that there may have been an initial stage of wall decoration in which gypsum dadoes played a part, but of this we have no trace. In the earlier phase of L. M. I, at any rate, the walls were entirely masked with painted stucco.

Painted rosette frieze.

The reaction of the earlier decorative system on the later was well shown by fragments of fine painted rosettes, with bright red, white, black, and orange colours, that occurred in the upper layers of the deposit in the central hall of the building, reflecting on a smaller scale the relief band of the earlier Propylaeum. There is every reason for concluding that rosettes of this painted class had now surrounded the portals in the same way. The later decoration would, in fact, stand to the earlier, as the painted rosette bands round the doorway of a Late Minoan tomb at Mycenae to the similar bands in relief of the 'Atreus' façade, the M. M. III date of which may be now regarded as ascertained.

In the same layer of floor deposit were also found other painted stucco fragments showing a row of spirals.

The 'Cup-bearer' Fresco.

Discovery of 'Cup-bearer' fresco: elongated 'rhyton' type.

But a far more interesting discovery awaited us. Fallen backwards from the Western wall, about two metres North of its projecting spur, there came to light, face upwards, and resting somewhat irregularly on the rubble debris that overlay the floor of a narrow passage-way behind, two large pieces of painted stucco showing that the inner walls of the Propylaeum hall had been decorated with human subjects belonging to the same series as those already discovered in the entrance Corridor within the West Porch. These pieces, in fact, formed the greater part of a life-sized figure of a goodly

youth holding, after the manner seen on the Egyptian wall-paintings, a long pointed cup, in which we may recognize a somewhat elongated version of a form of 'rhyton' or libation vase which had a long vogue from the close of the Middle Minoan Age onwards.[1] From the red bands on its blue ground it may best be regarded as of silver, with mountings, probably, of copper (see Coloured Plate XII).

With his right hand he holds aloft the handle of the cup, level with his forehead, the upper part of his body being thrown back, the better to support the weight, while his left hand below, near the waist, grasps its pointed base. His tight-fitting girdle, with its central red roll showing spiral decoration and its blue border, seems to have been plated with the same two metals as the vessel. The kilt below it, tightly gathered round his loins, shows in its upper width a quatrefoil pattern[2] on an orange ground, while the blue band below this is bordered with the 'notched plume' motive, the religious associations of which have been traced above.[3] It recurs on the wings of sacred Griffins and on the flounces of the Snake Goddess, as well as on her votive arrow plumes. The beaded network suspended from the front of this lower band given in the restored drawing, Fig. 443, is supplied from the lower parts of similar figures found in the 'Corridor of the Procession'.

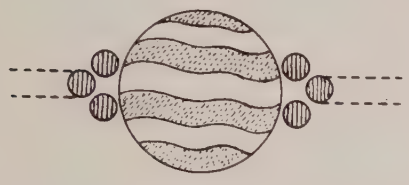


FIG. 441. LENTOID AGATE GEM MOUNTED WITH SILVER BEADS, ON CUP-BEARER'S WRIST.

Costume and ornaments.

A band is seen on the right shoulder, and would have run across the chest like the collar of the Priest-King relief illustrated in the Coloured Frontispiece. Two silver armlets encircle the upper part of the left arm, and another the right wrist, while on the left wrist, evidently attached by a thread or wire, appears what is clearly a perforated lentoid gem of banded agate with a mounting of silver beads (Fig. 441). We have here an interesting illustration of the manner in which many of the Minoan bead-seals were worn. A similar method of wearing a signet gem is also depicted on the image of the Dove Goddess found in the very late Shrine of the Double Axes,[4] and again on the left wrist of the Goddess seen in the hut-urn from the Spring Chamber.[5]

Agate bead-seal.

[1] See Suppl. Pl. XXVIII. It will be seen that the long pointed type is very characteristic of L. M. I *a* at Gournià; but it survives to the latest Minoan and Mycenaean phase.

[2] This originates rather from inlays than from a textile pattern.

[3] *P. of M.*, i, pp. 531–50 and Figs. 399–401.

[4] See above, p. 337 and p. 340, Fig. 193, *a* 1.

[5] See above, p. 129, Fig. 63.

To these the figures in the 'Corridor of the Procession' enable us to add silver anklets of Syrian fashion.[1]

Silver ornament in front of ear.

But the most remarkable personal ornament is the small silver plate—for so we must interpret it—with the lower part protruding but otherwise square-cut, that appears immediately in front of the ear (Fig. 442 A). It does not seem to depend from the side-lock of hair, like the Old Slav 'temple rings', neither does it seem to be attached by means of any perforation of the ear itself. It can only be supposed that it was in some way looped round the root of the ear. Its form somewhat resembles half one of the plates of known types of Libyan ear-rings, but these were attached by rings through the lower lobe of the ear.[2]

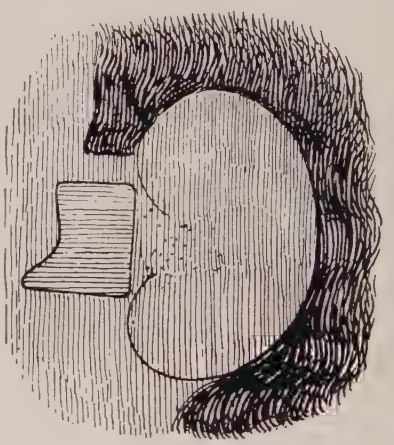


Fig. 442 A. Silver Ear-ornament of Cup-bearer. ($\frac{2}{3}$)

Conventionalized upper rock border.

Above the figure is seen part of a wavy border, formed of successive bands of black, blue, and Venetian red, representing the descending rock-work of Minoan tradition in a highly conventionalized form, which recalls that seen on the 'Partridge Frieze'.[3]

Second figure in front.

Immediately in front of the vase has been preserved a part of the upper arm of another youth, wearing an orange armlet—indicative of gold—with spiral decoration. It is more or less on a level with the arm-band on the left upper arm of the other figure, and points to the same attitude of grasping the lower end of a vessel. It shows, moreover, that the figure of the Cup-bearer itself was part of a continuous series like those of the 'Corridor of the Procession'. The two figures are restored in Fig. 443.

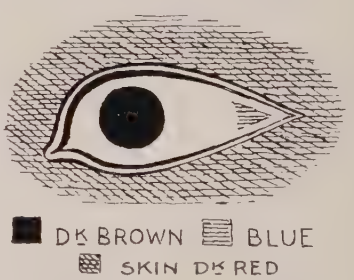


Fig. 442 B. Eye of Cup-bearer.

The flesh tint here, as elsewhere on the Minoan frescoes, is of deep reddish brown. This male convention offers even a somewhat stronger contrast to the white complexion of the other sex than in the Egyptian school from which it was doubtless adopted. The dark eye, as part perhaps

[1] See below, p. 726.

[2] See Oric Bates, *The Eastern Libyans*, p. 131, Fig. 38 (ear of Libyan prince from relief at Beyt-el-Wady), and compare Fig. 37, *a*, *d*, *e*, *f*.

[3] See above, p. 109 seqq. and Coloured Plate VIII.

of its half-profile rendering, shows a blue, triangular patch in its outer corner (Fig. 442 B). The head has an European aspect. Coupled with the black curly hair and high, brachycephalic skull this feature recalls an indigenous Cretan type, still represented in the White Mountains. The physiognomy, of course, is of generalized rather than of individual character, simply representing one of a long series of repetitions, but from the racial point of view this rather increases its value. The lips are slightly full, but the profile has not a Semitic cast, and the nose shows nothing of the exaggerated aquiline outline that we note in the portrait, probably of a Priest-King, seen on the M. M. II seal-impression illustrated above,[1] and which certainly betrays proto-Armenoid affinities. It is more closely akin to the female profile, with the nose slightly 'tip-tilted', depicted in the fresco from the Queen's Megaron.[2]

'Mediterranean' type of Cup-bearer.

FIG. 443. CUP-BEARER AND SIMILAR PROCESSIONAL FIGURE IN FRONT RESTORED FROM FRAGMENT.

We have here before us, in fact, a sun-burnt scion of the 'Mediterranean race'—the stature, as restored, however, 1·75 metres (5 ft. 8 in.), being somewhat above what appears to have been the average height of Minoan men. (See Coloured Plate.)

The colours were almost as fresh as when applied over two and a half millenniums before, and the impression made by this discovery at the time of finding, when as yet no real portrayal of this mysterious Minoan race was

Overwhelming impression

[1] *P. of M.*, i, pp. 8, 9 and Fig. 2 and cf. *ibid.*, p. 272 and Fig. 201. The female head from the fresco of the Queen's Megaron is there given for comparison.

[2] See *ibid.*, p. 272, Fig. 201 and cf. p. 8.

of first discovery.

known, remains uneffaceable. 'There was something very impressive in this vision of brilliant youth and of male beauty, recalled after so long an interval to our upper air from what had been till yesterday a forgotten world. Even our untutored Cretan workmen felt the spell and the fascination. They, indeed, regarded the discovery of such a painting in the bosom of the Earth as nothing less than miraculous, and saw in it the "ikon" of a Saint. The removal of the fresco required a delicate and laborious process of under-plastering, which necessitated its being watched at night for fear of disturbance, and old Manolis, one of the most trustworthy of our gang, was told off for the purpose. Somehow or other he fell asleep, but the wrathful Saint appeared to him in a dream. Waking with a start, he was conscious of a mysterious presence; the animals round began to low and neigh, and there were visions about; "*φαντάζει*", he said, in summing up his experiences next morning, "the whole place spooks!"'[1]

'The Saint.'

Double range of figures.

The total height of the fresco band, including the base and the conventional border above, was about 2·5 metres and, as in the case of the 'Corridor of the Procession', we must assume a second band of figures above, making the whole 4·10 metres high. Since the height of the columns was 4·60 metres, thus supplying the level of the entablature and corresponding side-beams, there would have been ample room for some kind of painted frieze or cornice above the fresco band.

The figures on the side of the hall to which the Cup-bearer belongs, may all, perhaps, be taken to have moved outwards. Starting in the Southern section from the pier at the end of the West spur of wall, which gives a space 1·65 metres wide, and allowing about half a metre for each figure there would have been room there for three figures. A continuation of two more figures on the West wall would have led to the place occupied by the Cup-bearer, and between that and the border of the stylobate there was room for six more figures, making nine in the lower band of that section of the East wall, so that altogether it would have contained eighteen. There were thus twenty-four in all, including those on the cross-wall, so that, assuming a similar arrangement on the East side, the entrance hall of the Propylaeum would have presented, in eight separate groups, a processional series of forty-eight. The Northern section of the building being less deep would only have afforded space for a series of seven figures on each of its side-walls which, with the same number as in the other case on the two spurs, gives ten below and above, making a score on either side, or forty in all. There would thus have been eighty-eight processional figures within the

Eighty-eight in hall of Propylaeum.

[1] A. E., *Monthly Review*, March 1901, p. 125.

FIG. 444. PART OF WEST BAY OF FIRST SECTION OF PROPYLAEUM AS RESTORED, WITH REPLICA OF CUP-BEARER FRESCO AND COMPANION FIGURES PLACED IN POSITION OCCUPIED BY THE ORIGINAL FRESCOES. THE SACRAL HORNS OF LIMESTONE FOUND ON TERRACE LEVEL BELOW ARE SET ON THE ROOF (RESTORED).

later Propylaeum, not counting the possible addition of two pairs of figures, one above the other, at the end of the projecting spurs, which might well have served as connecting links between the groups in the two sections of the hall.

We may venture to infer that those of the Northern section were represented as moving in the same direction as the others, and as if bearing precious vessels borne down the steps beyond from the central hall and sanctuary of the Palace on that side.

Replica of figures restored in position.

The remains of the Cup-bearer fresco, like the others discovered on the site, have been transferred to the Candia Museum, but in order to preserve the archaeological record on the spot, Monsieur Gilliéron, fils, was commissioned by me to execute a replica, which has been placed on the section of wall that had been occupied by the original, as now restored by me, with one of the supporting columns (see Fig. 444). This he has done with his usual mastery of the Minoan spirit, the legs being completed from one of the perfect representations found in the Corridor, while the youth immediately in front has been restored from the same source. Corresponding figures based on the models thus supplied have also been placed above these.[1] The result has been to present to the spectator, at least in a fractional degree, the brilliant effect which these processional figures, one ranged above the other, must once have presented in this inner entrance hall.

For the exhibition and lighting of this extensive system of pictorial decoration, the lesser breadth of the Propylaeum as it existed in its later shape decidedly gave better scope than the deep bays of the earlier building. Whatever falling off there was in spaciousness and inner structural solidity was more than compensated by the better perspective lines and richer framing of the vista thus obtained, backed by the sunlit effect of the ascending stairway beyond. This is well brought out in the restored drawing by Mr. Theodore Fyfe (Fig. 445).

Frescoes: a record of religious processions.

It is a fair conclusion that the scenes here depicted were intended as a glorified representation of actual ceremonial processions in which, at fixed seasons, the acolytes and ministers of the Palace cult carried out the sacred vessels or other relics, to be shown to the assembled people in the West Court. There are, indeed, as we shall see, indications that, at the point where the procession approached the Western portal, a facing figure of the

[1] Monsieur Gilliéron has also added part of a youth behind carrying a carved steatite 'rhyton' of the same pointed type as that found at Hagia Triada with reliefs of boxing and bull-grappling scenes, overlaid with the gold plating that seems to have been an original feature of all such vases (see *P. of M.*, i, p. 676).

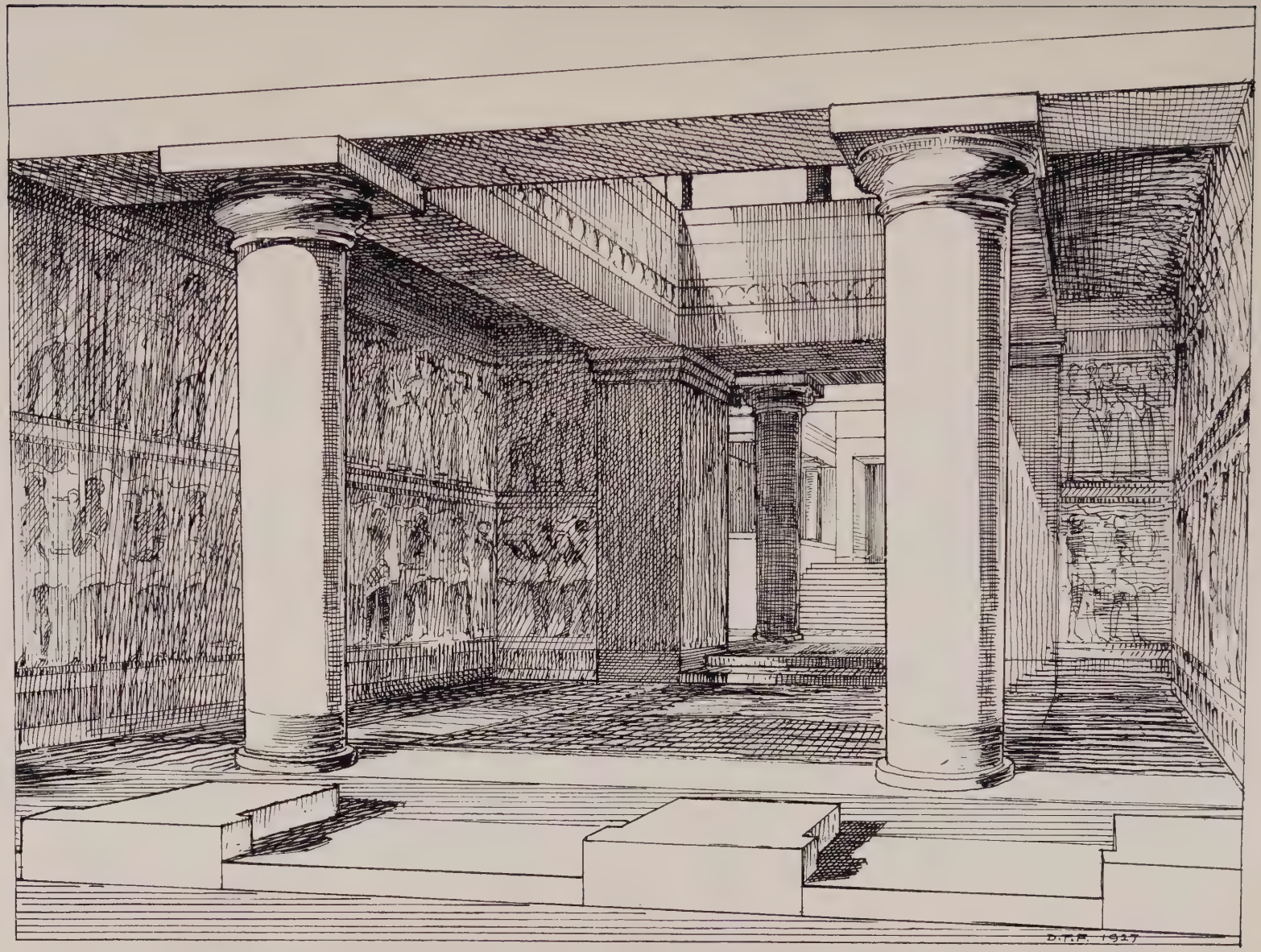


FIG. 445. RESTORED VIEW OF HALL OF SOUTH PROPYLAEUM: STEPS TO UPPER PORCH VISIBLE BEYOND. BY THEODORE FYFE.

Goddess herself was portrayed, holding, it is suggested, her double-axe symbol in either hand. There is evidence that in the days of the Late Minoan Palace, a treasury chamber, marked by the sunken remains of ritual vessels, opened off the central Tri-columnar Hall of the Western section,[1] which itself seems to have been the chief religious centre of the building. From this repository the holy objects would have been borne through the porch of the upper Propylaeum, thence down the broad step-way and so, through the central passage of the columnar hall below, to the Corridor and, eventually, the Court beyond.

Sacred vessels of treasury cist exhibited.

The discovery now made of the stone-built repository on the floor of the M. M. III *a* Propylaeum, and the indications of the existence of some interior sanctuary in its Eastern wing, supply an interesting commentary on the later, pictorial records of such ceremonial processions. It looks as if it had been the treasury Cist in this Southern entrance hall, rather than the contemporary Temple Repositories of the central region, that may have served as the earlier starting-point of similar files of bearers of sacred vessels, who would have followed the turns of the egress passage in its original form.

Upper Porch of South Propylaeum and its Dependencies.

Foundations of bastion supporting steps to upper Porch.

A narrow open passage separated the Northern border of the lower hall of the Propylaeum from the broad flight of steps leading to its upper Porch. The Eastern flank of this flight had been supported by a massive bastion, the rough foundations of which were brought out by later researches, underlying the wall of the Greek Temple described above.[2] That the existence of this extensive block of foundations had not been discovered in the early days of the excavation was due to the fact that what had been at first mistaken for the natural clay surface of the ground, and included in the 'Central Clay Area' of the First Report,[3] proved in this and other cases to be an artificial clay bedding on which masonry had originally rested, and which often overlay earlier remains. The limestone superstructure had here been torn away, but the solid foundations beneath the clay layer remained intact. The existence of the base-blocks underlying the two Northern column-bases of the adjoining Propylaeum Hall had been obscured in the same way.

It was clear that most of the existing base-blocks of the Hellenic building had been taken from the bastion of the adjoining flight of steps, and, with the object of re-establishing the connexion between the lower hall of the Propylaeum and the floor-level of the *piano nobile* above, use has been made of some of these. Both sections of steps and blocks from the

[1] See below, p. 816 seqq.

[2] See above, p. 6 and Fig. 2.

[3] *B. S. A.*, vi, 1900, p. 17, § 10.

FIG. 446. VIEW FROM LOWER SECTION OF SOUTH PROPYLAEUM, SHOWING STEPS TO UPPER PORCH AS RESTORED AND PARTS OF BASTIONS; THE COLUMN-BASE OF THE UPPER PORCH AND DOUBLE ENTRANCE APPEARS ABOVE, WHILE BEYOND IS SEEN THE SOUTH WALL AND RESTORED COLUMN OF THE CENTRAL STAIRCASE.

supporting wall were thus recovered near by, and in this way it has been possible to reconstitute the Eastern end of the lower steps and the adjoining part of the bastion wall, and finally to restore a large part of the flight to the level of the landing (see Fig. 446).

Displaced column-bases.

In the centre of the pavement of the adjoining Upper Porch has been placed and completed a fragment of a large column-base, 1·15 metres in diameter, which had drifted down to the edge of the Southern terrace below, but with great probability can be assigned to this position. There is, indeed, no intermediate place to which it could have belonged. Its diameter, compared with the mean of the column-bases of the lower hall of the Propylaeum, which seems to have been about 92 centimetres, is about one-fourth greater, and points to a greater relative height of the column, some 5·80 metres against 4·60. Of the doorways opening from the back of this Porch into the interior a gypsum jamb on the left side lay practically in position on the top of the basement wall, which would also have supported the other two.

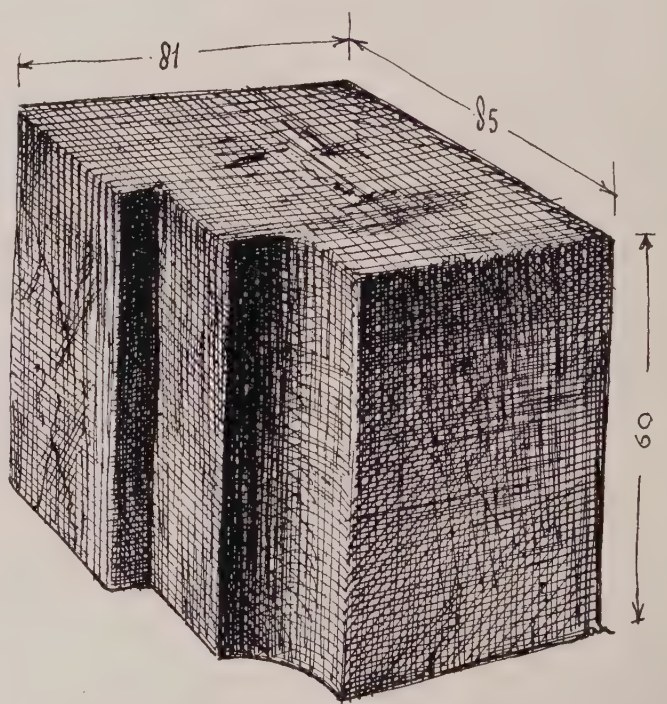


Fig. 447. Gypsum Jamb on West Side of Entrance of Upper Entrance of Propylaeum (restored Drawing by Piet de Jong).

Gypsum jamb of entrance.

A restored drawing of this is given in Fig. 447 : it is interesting as showing a rounded hollow for the inner of the two wooden door-posts. A corresponding Eastern jamb and the double one in the centre between the two doorways have been restored in ferro-concrete on the model thus supplied.

It seems probable that the terraces formed by the East bastion and the corresponding structures opposite on either side of the flight of steps leading to the Upper Porch were surmounted by columnar balustrades as shown in the Plan, Fig. 448, forming fine shaded *loggias*. These must have been approached from the Porch by three steps, since, in order to be on a level with the pave-

Conjectural *loggias*.

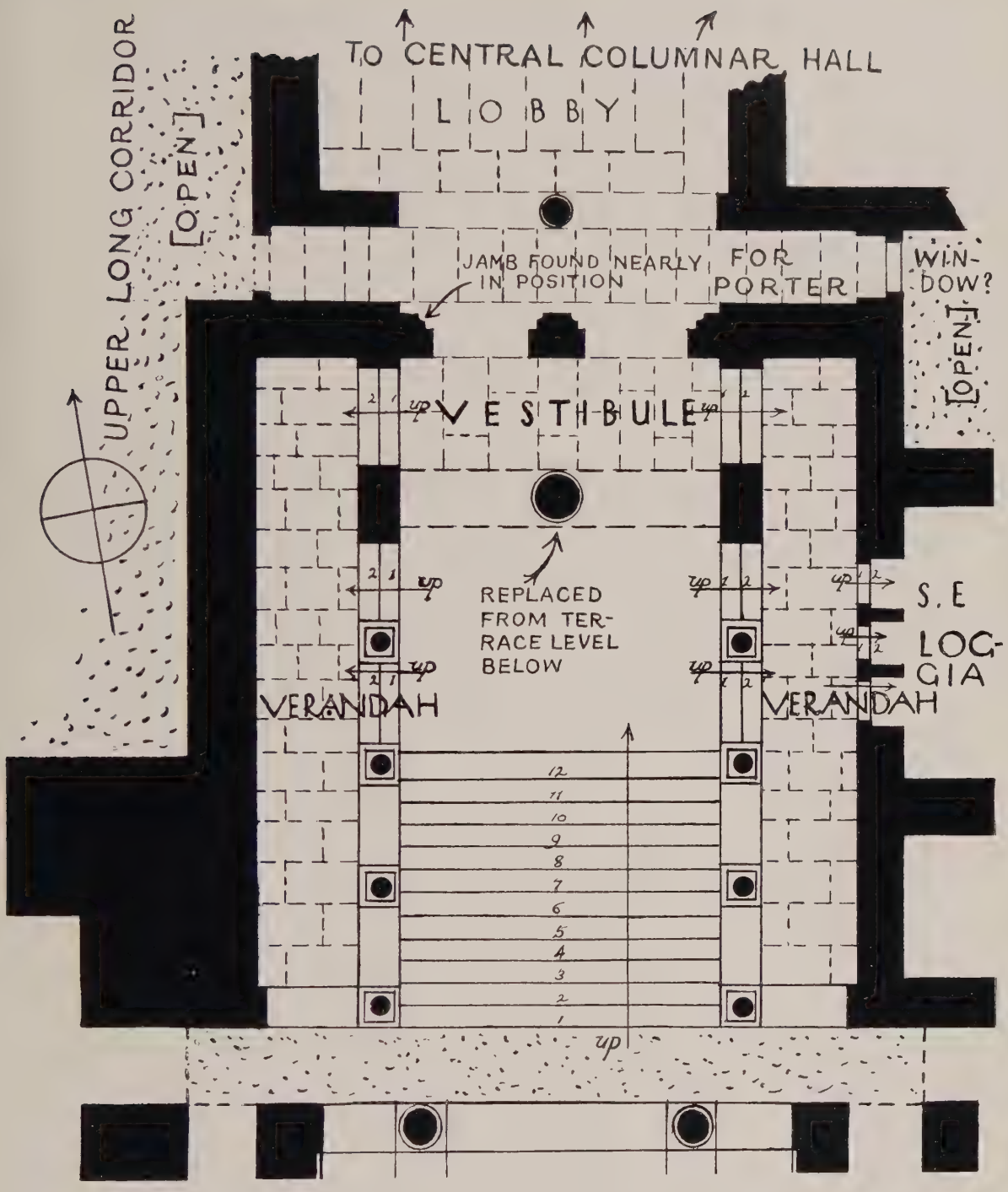


FIG. 448. RESTORED PLAN OF UPPER PORCH OF PROPYLAEUM AND ITS DEPENDENCIES.

ment above, the adjoining room of which we have the ground-plan on its East border, its level must have been somewhat higher than the landing of the broad flight of steps and the threshold of the portals beyond.

Tarazza of upper Long Corridor.

The double entrance seems to have given on to a transverse space, which in the Western direction led into a long open area, forming an elongated light Court placed immediately above the 'Long Gallery' of the basement magazines. Many fragments of the pavement of this upper 'Long Gallery' were found consisting of the usual Minoan *tarazza* showing a finely pebbled surface, and of the variety used for roof surfaces, with a base of impermeable blue-black clay or *lepida*,[1] which itself affords sufficient proof that this area was open. It afforded access, as will be seen from the general upper story Plan C at the end of this Volume, to a series of important halls on its West flank end. At the South end of this 'Upper Long Gallery' were two elongated spaces answering to the plan of two magazines below. Remains of the entrance jambs of these were found in position, only slightly sunken, on the upper floor-level (see Fig. 449, right). The masonry used here was of limestone, indicating that it was exposed to the open air, and in contrast to the jambs of the Lower Long Gallery, which, being in a covered passage, were of gypsum.

'Porter's Lodge.'

On the right side of the inner space on to which the Upper Porch of the Propylaeum gave, and facing the doorway opening into the Upper Gallery, the basement walls that serve as a guide indicate the existence of a narrow chamber or closet which would have been the natural station for a porter or warder of this entrance, giving access to the most important halls of the West Section of the Palace (see restored upper Plan C at end of Volume). A porter's lodge, indeed, is generally found in such a position: examples are to be seen by the Northern and North-Eastern entrances and in the narrow space adjoining the 'Throne Room' of the West Porch, which also commanded the ingress into the adjoining 'Corridor of the Procession'. In the present case it may have been lit by a small window opening on the little light-well immediately behind it.

Lobby of principal Columnar Hall.

The intervening space to which the Upper Porch gives access has its main opening on the North, into the antechamber or lobby of the principal, 'Tri-columnar Hall' of this section. A clue to the Southern border of this lobby is afforded by the gypsum pillars below the 'proto-Palatial' Magazines marked by the cross *paté*, illustrated above (see p. 663, Fig. 424). An additional width was given to one of these in the days of the 'Middle Palace', evidently corresponding with a pier or column on the upper floor.

[1] See above, pp. 327, 328, Fig. 185, B.

Fig. 449. View looking South from near West Column-base of 'Central Tri-columnar Hall' showing Lobby and Upper Porch of South Propylaeum beyond and to the Right the Limestone Jambs of Magazines of the 'Upper Long Corridor'.

A column-base has therefore been restored at this point which forms the centre of the South line of the antechamber in question. It may have received light on the West side from a window opening on the 'Upper Long Corridor'.

The Northern boundary of this space, by which access was afforded to the principal Columnar Hall beyond, corresponds with a well-marked line of upper doorways, almost continuous remains of which have been preserved East of this section. As to the arrangement in the section itself, evidence is wanting, but it has been thought best in the restoration (see Fig. 449 and Plan C) to adopt the plan of a central block of wall with a doorway on either side, as best shutting out the interior of the 'Tri-columnar Hall' from the Porch. This was desirable not only for the sake of privacy, but in order the better to mask the fact that the axial disposition of this Hall differs from that of the system of approach from the South, owing to its widening out on its Eastern border.

The antechamber, thus delimited with its columnar opening on the side of the Upper Propylaeum Porch, giving access on its opposite border to the main ceremonial hall, and connected by the cross passage-way with the open corridor leading to the other upper halls, must have been a much frequented lobby and the true *foyer* for the whole West Section of the Palace. Its walls may well have exhibited a processional scheme of decoration similar to that of the lower hall of the Propylaeum and of the entrance Corridor beyond.

The view, Fig. 449, looking South from near the West column-base of the central, three-columned Hall, gives a good view of this lobby in its relation to the surrounding structures. Parts of the upper floor are here shown as restored in ferro-concrete, with the door-jambs of the Upper Porch beyond, and to the right the limestone jambs of two Magazines belonging to the open 'Upper Long Corridor', while a section of the Lower Long Corridor is seen below. Beyond rises the restored bay of the lower Propylaeum Hall, and on the opposite slope, directly facing, appears the Stepped Pavilion and adjoining bath chamber of the 'Caravanserai'. On the horizon is the peak of Juktas.

§ 63. The Procession Fresco, with Comparative Materials; Egyptian Representations of the Minoan Envoys from 'Keftiu'; 'The Captain of the Blacks'.

The 'Procession Fresco'—in double rows; Wide extension of processional scheme in Palace; Successive groups in Corridor—tentative restorations; Youths in priestly robes—Hagia Triada Sarcophagus suggests musicians; Variegated stone vase; Parallel for Goddess holding Double Axe in each hand; Youths like 'Cup-bearer'; Silver anklets—a Syrian fashion; Minoan sandals—ivory foot; Wavy bands—traditional rock borders; Embroidered patterns—compared with those of 'Ladies in Blue'; Influence of inlays on patterns of embroidery; Identity of pattern on Minoan dress and Egyptian ceiling; The network patterns; Place of 'Procession Fresco' early in 'New Era'; Was it an original element of restored building? Hint of an intermediate dado system in Corridor; Minoan 'tributaries' from Keftiu and the 'Isles of the Sea' on wall-paintings of tombs of high officials, of Queen Hatshepsut's and Thothmes III's time; Tombs of Senmut, User-amon, and Puemra; Tomb of Rekhmara—Minoan types of vessels, curls and horn; Elephants' tusks borne by Minoan 'tributaries'; Ox-head laden with tusks on miniature fresco; African elephant known to Minoans; 'Poncho' on figure of H. Triada Cup; Herds of Asiatic elephants in North Syria; Minoan kilt with tassels and pendants; Spiraliform motives; Twelfth Dynasty waz *pattern; Minoan tribute-bearers of Tomb of Men-kheper'ra-senb; Traditional types of vases; Lacuna in Egyptian evidence; Relation of 'Procession Fresco' to Kadmeion frieze; Parallel from Mycenae; Painted stucco design found near Procession Corridor; Relief on Knossian 'rhyton'; M. M. III terra-cotta relief from 'House of the Sacrificed Oxen'; Early use of 'kilt' at Knossos—ceremonial garb and official uniform; Fresco fragments with 'Captain of the Blacks'; Negro auxiliaries, symptom of African connexions; Egyptian parallel; Were Black regiments employed on the Mainland side?*

With the partial exception of an important fragment described below, the 'Cup-bearer Fresco' is the only figure in the 'processional' series of which the head has been preserved. The great mass of the evidence, however, was brought to light in the Entrance Corridor of the West Porch named after these remains (see above, p. 682 seqq.).

The 'Procession Fresco': double rows.

There, separated by short intervals, were three connected groups of designs—here referred to as A, B, C—their lower parts and the greyish black band on which they stood adhering to the left wall, but some of the upper parts lying on their faces on the Corridor pavement. Although, on grounds already stated, it is fairly certain that two rows of figures had originally existed, one above the other, only remains of the lower row had been preserved. On the right wall, which had been destroyed, little more was found than parts of the narrow black band below, adhering to its base.

Group A, with the robe of the female figure in front completed, occupied a space of 2·10 metres, and consisted of seven figures. Group B, of twelve figures, was almost continuous with it, and was about 5 metres in length. Group C, with three figures, followed closely on the latter, and extended 2·50 metres. The whole wall-space covered, including the small breaks between the groups, may be estimated at 11 metres, and as there were twenty-two figures, this gives an average space of half a metre for each, though the individual espacement of the figures varied, some standing free, some considerably overlapping one another.

Taking the entire length of the Corridor from the East portal of the West Porch to the point where it abuts on the landing of the Staircase leading up from the South Entrance of the Palace as 56 metres, it appears that the number of figures on either side of this ceremonial passage-way—assuming that there were double rows—must have amounted to 224, or 448 in all, and 88 or more have been already estimated for the interior decoration of the two compartments of the Propylaeum Hall.[1] In this way we reach the total number of 536 life-sized figures, without reckoning the almost certain extension of the series to the Upper Propylaeum system. It seems likely that similar processional scenes filled the back wall of the porticoes on either side of its central flight of steps, as well as the lobby into which it opened.

Wide extension of processional scheme in Palace.

That the Upper Porch of the Propylaeum and its dependencies showed the same 'processional' scheme of decoration as the lower part of the system is indeed a conclusion dictated by every consideration of architectural unity. Of the wide extension of this scheme of decoration in the building, we have ample evidence. Fragments of frescoes belonging to these processional scenes were found on the waste heaps near the North-West Portico, which were evidently collected from a wide area of the Western wing of the Palace, and an isolated part of one occurred near the Grand Staircase of the Domestic Quarter—drifted, perhaps, down the slope from the West side

[1] See above, p. 708.

of the Central Court. It is probable, as pointed out below (p. 814), that the interior walls of the Stepped Porch leading down into the Central Court from the Western *piano nobile* were decorated in the same fashion. This pictorial series was, in fact, well adapted for varied repetition and indefinite extension.

A conspectus of the successive scenes, on a much reduced scale, is given in Fig. 450, and fuller versions will be found in the supplementary folding Plates XXV–XXVII. In order to supply, in some degree at least, the original effect, Monsieur E. Gilliéron, fils, in accordance with my own suggestions, has executed a series of restorations of the missing parts of the designs. Even in cases where much uncertainty exists, a working hypothesis of the original arrangement may still be useful, though it be of a provisional nature. It will be seen, however, that as regards the main features of the composition there are, at any rate, good analogies for the restorations supplied.

Successive groups in Corridor—tentatively restored.

As is clearly shown by the reduplicated feet, the first section of Group A—the beginning of the whole series on the left wall of the Corridor—consists of two pairs of youths walking side by side, and wearing long robes with vertical bands, of which the restoration is made possible by the appearance of a youthful attendant with a similar costume on an offertory scene of the Hagia Triada painted sarcophagus. He is playing a seven-stringed lyre like that shown in Fig. 450, A. In these long robes with their narrow upright bands, we may probably trace some priestly influence from the Oriental side. The bands—in one case decorated with rosettes [1]—must be regarded as running down the centre of the gaberdine in a manner for which there are many Semitic parallels.[2] The bands seen on the robes of the figures in the 'Palanquin Fresco' described below [3] are transverse, as are those on the long robes of apparently sacerdotal personages that appear on a not infrequent class of Late Minoan seal-stones of elongated amygdaloid form, usually of haematite, of which specimens are given in a later Section.

Youths in priestly robes.

In the case of these sacerdotal personages on seal-stones, the Eastern element is well marked by the fact that in three out of five specimens known to me he holds a single-bladed axe of a characteristic Syrian form,[4] itself betraying Egyptian influence.

The suggestion is made in the restored design that the figures of the first Group (A) represent musicians and singers, since on the Hagia Triada sarcophagus the youth referred to above as similarly attired is accompanying

H. Triada sarcophagus suggests musicians.

[1] The plaitwork pattern introduced in the case of figure No. 1 may be of later fashion.

[2] Compare, for instance, W. Max Müller, *Asien und Europa*, p. 298 (B.M. photograph No 234), p. 304, *Miss. Fran.*, 5, 204.

[3] See below, p. 770 seqq. and Fig. 502.

[4] They have been found at Beirût and elsewhere in Syria. They are also common in Cyprus.

the sacrificial pair in front of him with a tune on a seven-stringed lyre.[1] For this reason the figure, No. 5 of the present group, is restored, as playing a similar instrument. This parallel has a further value, since the scene referred to on the sarcophagus is a ritual celebration before the sacred Double Axes of the Minoan Goddess, an association which will be seen to bear on the interpretation here adopted of the central figure of what seems to be the Goddess herself in the succeeding Group B (No. 14), approached, it would seem, by adorants on either side. It is further to be noted as of considerable religious import that, as we see from repeated examples on the Hagia Triada sarcophagus, the particular kind of long Oriental robe worn by the first group of the Fresco was also common to female worshippers.

Nos. 1 and 2 of Group A are depicted as holding sistrums like that of the 'Harvesters' Rout' on the Hagia Triada Cup,[2] and No. 4, the double pipes, as on the painted sarcophagus from that site. The lower part is seen of the flounced skirt of a female figure (No. 7) who progresses slightly in front of the others of this group, showing the remains of one white foot with well-formed toes. She and her male companion (No. 6) are here restored with hands raised in the act of adoration.

Variegated stone vase.

The vessel held by No. 9 (Group B) is restored from a fragment which had drifted to the North of the site (see Fig. 451).[3] It is banded alternately black, white, rose, green, deep red, and yellow, and was evidently cut out of some brilliantly variegated rock, such as some of those used by the Cretan lapidaries. The expanding end of the handle, here three times repeated, recalls, on the other hand, the handles ending in papyrus tufts which seem to characterize certain vessels of Syro-Egyptian fabric.[4]

The central position of Group B is occupied by a flounced female figure in a facing position, but, according to the artistic convention of this time, with the feet and probably the head in profile. She is approached on the left by pairs of youths, following on to Group A, and on the right by two more couples of the same sex, the hindmost figure showing the end of a robe falling nearly to his ankles. Beyond this, again, are seen the feet of another male pair advancing to the right and belonging to the beginning of another scene (No. 19). Throughout this whole section only the feet and the lower borders of robes are preserved.

[1] See *P. of M.*, i, p. 440, Fig. 317. (Cf. below, p. 836.)

[2] See above, p. 47, Fig. 22, and Suppl. Pl. XVII.

[3] From a drawing by Monsieur E. Gilliéron, fils.

[4] Compare, for instance, p. 535, Fig. 339 (left), above, and cf. W. Max Müller, *Asien und Europa*, p. 308, for Nilotic ingredients in vases. In Fig. 450 and Suppl. Pl. XXIV the vase is drawn with a single handle.

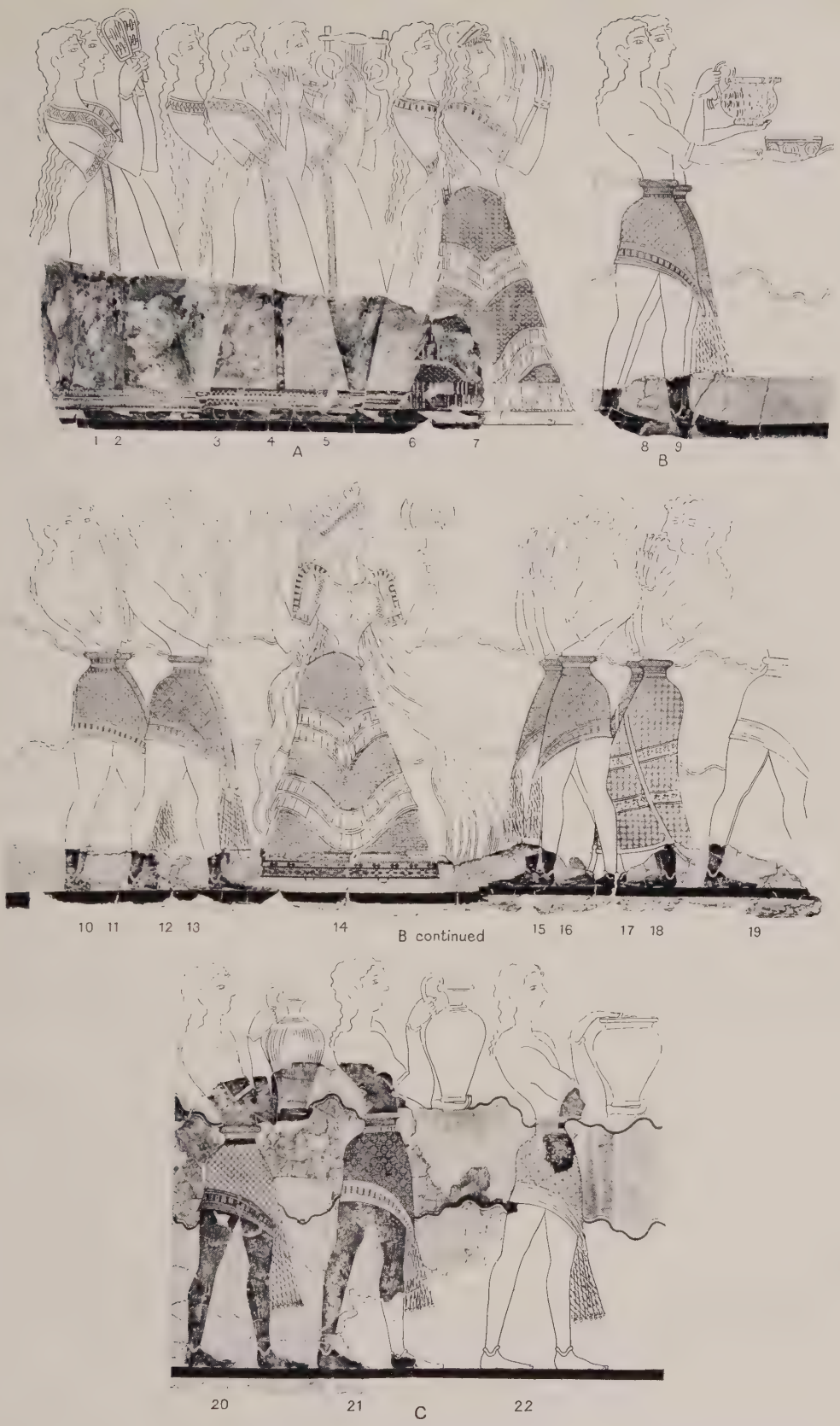


FIG. 450. SUCCESSIVE GROUPS (A, B, C) OF 'PROCESSION FRESCO'. FROM RESTORED DRAWING BY MONSIEUR E. GILLIÉRON, FILS.

Parallel for Goddess holding a Double Axe in each hand.

The association of the robes, divided in front by vertical bands, seen in Group A (Nos. 1–5, and probably 6), with a religious function, in honour of the sacred Double Axes of the Minoan cult, as shown on the Hagia Triada sarcophagus, offers here, however, a welcome clue to the interpretation of the richly robed female figure that forms the centre of the present group. It looks as if it might well have represented the Minoan Goddess herself holding the sacred symbols. A suggestion for the restoration of the figure is, indeed, afforded by a mould found at Siteia in East Crete, on which the Goddess is shown, in this case fully facing (this being a work of relief), holding the Double Axe in either hand.[1] She wears the usual flounced robe, and apparently some kind of crown, which justifies the crown of a sacral Minoan type, also common to Minoan Sphinxes, placed on the Goddess's head in the present restoration.[2] Although the mould belongs to the latest Minoan Age, the permanence of religious tradition makes the parallel still pertinent.

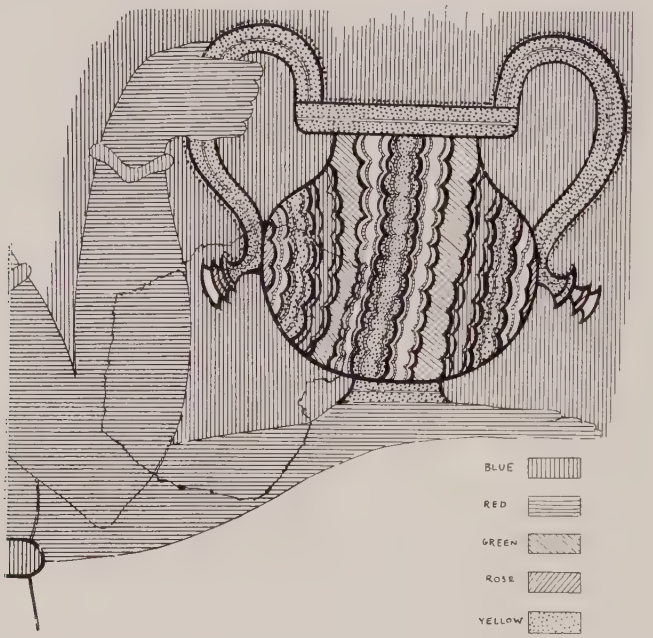


FIG. 451. FRAGMENT SHOWING VARIEGATED VASE.

A remarkable feature in what remains of the lower part of the Goddess, as here recognized, is the narrow curving white bands that approach the extremity of the lowest flounce. They may be thought to represent some kind of diaphanous veil, descending from her head and shoulders. Some analogy to this is presented by a curious disposition of the snakes of the Goddess as seen on a gem-type illustrated below.[3]

[1] Xanthudides, Ἐφ. Ἀρχ., 1900, Pl. IV (Β'), and cf. p. 26 seqq.

[2] A similar crown is worn by the female personage, clad in a long vertically banded robe identical with that of the lyre-player, on the H. Triada sarcophagus.

[3] See below, p. 793.

Youths like 'Cup-bearer'.

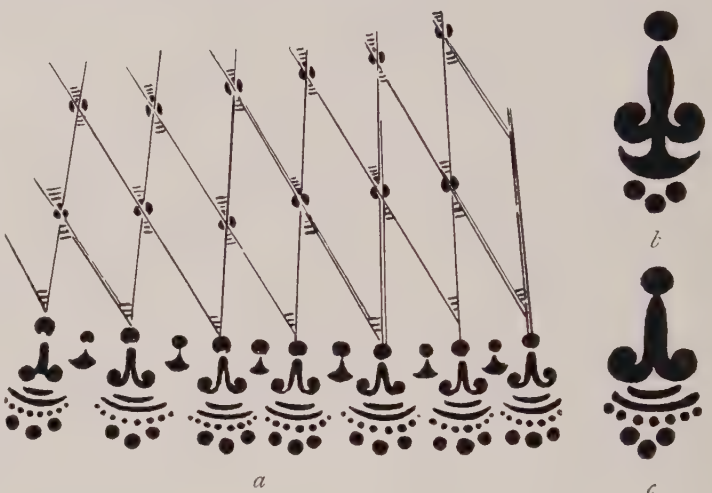
Of Group C, happily, more of the upper part of the figures has been preserved, and the figure of the 'Cup-bearer' here reproduced (Fig. 452: Coloured Plate XII), enables us to complete the picture. In this group appears a series of three youths, with enough of their arms remaining to show that they were carrying vases, much in the manner of the 'Cup-bearer'. In the case of No. 20 the lower half of the vessel itself is depicted, the body—of an orange hue, indicating gold—finely fluted, and with a blue, or silver, base showing a running spiral decoration. The bossed part of the bearer's belt is also blue with similar spirals, the same colour, with black bars, being repeated along its lower border, while the incurved middle section is coloured orange, and presents rosette ornaments. The belt of the youth immediately in front of him shows a variation of the same decoration, the rounded upper band and the lower border having an orange—presumably gold—ground, and the incurved middle blue or silver. The ornamentation is the same, differently distributed.

FIG. 452. THE 'CUP-BEARER FRESCO', WITH FIGURE IN FRONT RESTORED.

The close-fitting kilts, or short tunics, descend in front to a point a little above the level of the knee, the peak—to judge from the appearance of No. 20—being weighted with a piece of metal to keep it in position. These kilts are brilliantly embroidered. On that of the first figure we see an orange ground with a blue border barred with black, and on that of the second a blue ground with a gold border showing a barred blue centre. The respective decoration of scale and diaper patterns is elaborately worked out (see below, Fig. 456, *b*, *c*), and in both cases appears a blue beaded net-

work, falling down from the point of the tunic to the level of the middle of the shins, and terminating below in blue pendent beads of the form that combines suggestions of the lily and the papyrus (see Fig. 453, *b*, *c*).[1] These bear a very close resemblance to those seen on the border of the magnificent bronze basin illustrated above, p. 643, Fig. 419 A.[2]

Pendent nets and beads.



a *b* *c*

FIG. 453. *a*, *b*, *c*, BEAD PENDANTS AND NETWORK OF PROCESSIONAL FIGURES 20 AND 21.

Like the Cupbearer, the youths here depicted wear silver (blue) armlets on the upper part of the arm a little above the elbow, and they, doubtless, also wore them on their wrists. On the feet, preserved, as on those of all the other figures, are seen anklets which, from their blue colour, may be also regarded as of silver (Fig. 454). These curve downwards so as to fit the ankle, and in the case of No. 20 they present a row of black spots pointing to some inlay. These blue anklets are also very well marked on the feet of the Goddess.

Silver anklets: a Syrian distinction.

FIG. 454. FOOT OF PROCESSIONAL YOUTH SHOWING ANKLET.

The appearance of these ornaments on the feet of processional figures is of considerable interest. Anklets on Egyptian monuments are associated with Asiatics from a very early period as a sign of dignity.[3] Already on a fragmentary monument belonging to the latter part of the Old Kingdom, before 2500 B.C., anklets with a floral ornament in front and behind are seen

[1] Type *b*, which is slightly variant, is seen on Nos. 12 and 13 (Group B).

[2] Cf Fig. 507, p. 779, below.

[3] See W. Max Müller, *Fußspangen als Adelzeichnung bei den Semiten* (*Or. Lit. Zeitung*, 1909), p. 381 seqq.

on the feet of a 'Mesopotamian' prince wearing a fringed mantle.[1] W. Max Müller, in reviewing the later evidence, was led to the conclusion that the anklets were a 'privilege of rulers or high officials, confined in the fifteenth and fourteenth century B. C. to the Syrian nobility'.[2] These Oriental anklets were simple circles, without the curve that in the Minoan type follows the lower contour of the ankle. Anklets signs of dignity.

The fact that in contemporary estimation these ornaments were signs of dignity agrees with their appearance on the anklets of the Goddess herself, as here recognized. At the same time they fit in with the special character of the offertory figures as taking part in a ceremonial function. In other cases, as noted below,[3] bracelets of the same form were worn by persons of both sexes.

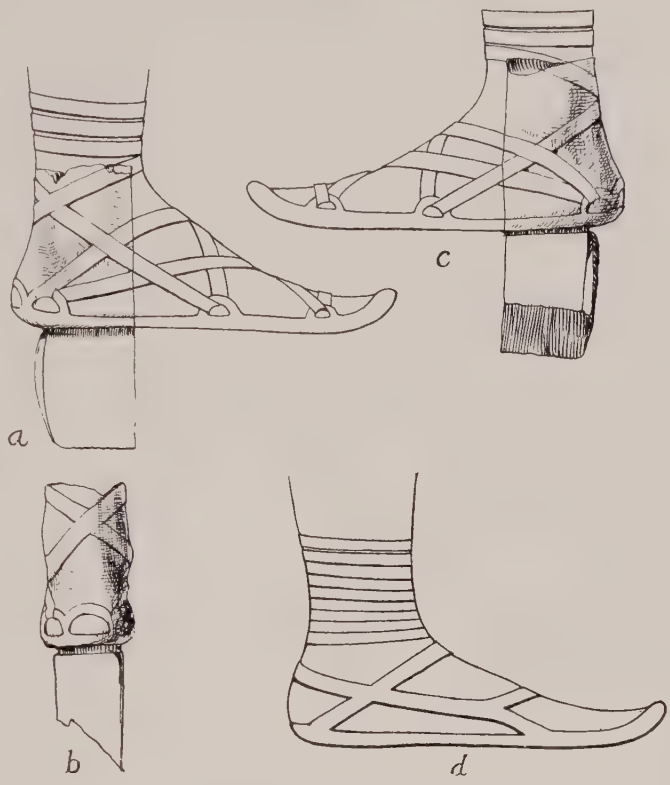


FIG. 455. *a*, *b*, *c*, FOOT OF IVORY FIGURINE FROM KNOSSOS RESTORED: SHOWING SANDALS AND BANDS ABOVE ($\frac{1}{2}$); *d*, SANDAL AND BANDS ON FOOT OF TRIBUTARY FROM KEFTIU, REKHMARA TOMB.

That the figures here, though they wear anklets, are otherwise unshod, is itself a noteworthy feature. Except in the case of children, it is usual in Minoan Art, wherever the design is large enough for the insertion of such a detail, to see the feet wearing sandals or wholly encased in shoes.

[1] W. Max Müller, *Egyptological Researches*, i (1904), pp. 9, 10, and Pl. II. Only the lower part of the figure is preserved.

[2] W. Max Müller, *op. cit.*, *O. L. Z.*, p. 382. A good example is seen in the Tomb of Harem-hab (E. Meyer, *Photographische Darstellungen der Fremdvölker*, 743, and W. Wreszinski, *Atlas zur altägypt. Kulturgesch.*, i. 78). In Champollion, *Monuments*, 158, two anklets are erroneously represented on one foot. The anklets on this monument are relatively broad. See, too, Petrie, *Six Temples of Thebes*, Pl. X

[3] See p. 750.

Minoan sandals, part of ivory foot.

A good example of the Minoan sandal is supplied by part of a foot of an ivory figurine (Fig. 455, *a*, *b*, *c*) found in disturbed earth on the Southern borders of the Palace, and probably derived from one of the Treasuries. For comparison, a specimen is given (Fig. 455, *d*) of one that appears on the foot of a 'tributary' from Keftiu in the Rekhmara series. Another characteristic Minoan figure of the Men-kheper'ra-senb tomb wears shoes with uppers, and apparently puttees above.[1] In the case of travellers some kind of foot-gear might be expected. The bare feet of the 'Procession Fresco', on the other hand, is natural in the case of functions performed within the Palace walls.

Thanks to the preservation of the middle parts of the figures in Group C we are able to distinguish a characteristic feature of the background, also visible in the case of the Cup-bearer[2] (see Coloured Plate XII). This is a wavy band with a blue field with a thin and a thick black line running along the inside of its borders, the outline of which is marked in red. The undulating orange field beneath this must be taken to represent the foreground. The base of the whole is formed by a black band. Above the band is a pale buff ground, and the 'Cup-bearer Fresco' enables us to complete the scheme with a series of waved prominences descending from the upper edge of the field. These show alternately narrow blue, red, and yellow bands with black lines between.

Wavy bands: traditional rock borders.

The increase in our knowledge of comparative examples now enables us to understand these wavy bands of background. They represent in fact the simplified tradition of the rocky Cretan landscape, as rendered in their peculiar manner and with naturalistic details by the indigenous artists of a much earlier period.

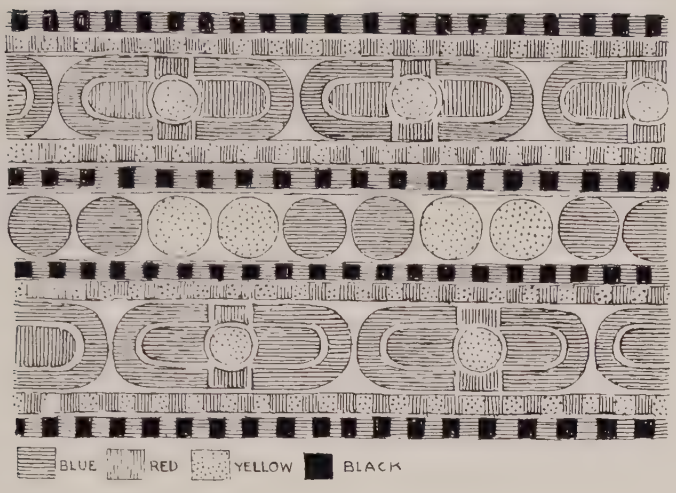
The most characteristic feature of this motive, the bringing down of the farther border of the horizon, and displaying it upside down, is already well illustrated by the 'Saffron-gatherer Fresco', attributed above[3] to the closing phase of M. M. II. In a conventionalized form, closely parallel with that of the 'Procession Fresco', we have seen it on the 'Partridge Frieze',[4] belonging

[1] It bears a certain analogy with a type seen on a Syrian in the tomb of Amu-neṣeh (W. Max Müller, *Egyptological Researches*, ii, Pl. XXV); G. A. Wainwright (*Liv. Anns.*, vi, Pl. XV, 24). Wainwright (*op. cit.*, p. 66), quite unnecessarily, compares the foot-gear of the Keftiu folk with the Hittite boots with up-turned toes, as seen at Ivriz and elsewhere. The Syrian comparisons, however, which go back to types of Twelfth Dynasty date seen at Beni Hasan, have a greater value.

[2] In the case of the 'Cup-bearer Fresco' there seems to be a slight variation, the outer red line of the central band being wanting.

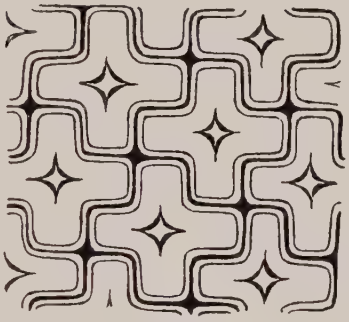
[3] See *P. of M.*, i, Coloured Plate IV, and p. 265.

[4] See above, pp. 114–15, and Coloured Plate VIII.

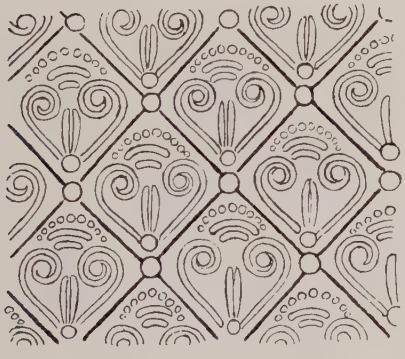


a

b



d



c

e

FIG. 456. PATTERNS ON ROBES OF PROCESSIONAL FIGURES (*a*, No. 14, GODDESS; *b*, No. 20; *c*, No. 21; *d*, No 22; *e*, 'CUP-BEARER').

to the beginning of the New Era, and contemporary with the painted stucco designs of the 'House of the Frescoes'. In a shape curiously resembling that which makes its appearance above the head of the Cup-bearer,[1] it is translated into inlay work on the dagger-blade with the lion hunt from the Fourth Shaft Grave at Mycenae,[2] and it occurs in a parallel style under Cretan influence on the dagger-blade of Queen Aah-hotep (1587–1562 B. C.).

In the 'Partridge Frieze' the upper series of undulations is bordered below by a broad band, the field of which changes vertically from dull white to black, while below is a simplified rendering of the ground contours, with asterisks in place of flowers.

So, too, in the Megaron Frieze at Mycenae, representing warriors, horses, and chariots, beside buildings, the structural details of which reflect so faithfully the M. M. III traditions of Knossos,[3] the rock-work descending from the upper margin also forms a prominent feature[4]—the field in this case, as in the Partridge Fresco, changing the ground colour vertically.

In the last-mentioned example we see a close approximation to the shape in which this conventionalized background appears in the 'Procession Fresco'. On the other hand, in the frieze of full-length female figures from the Kadmeion at Thebes, belonging, as shown below, to the later phase, *b*, of L. M. I, there is a decided falling off. The waving horizontal band is still there, but there are, apparently, no traces of the descending rock-work. In the similar processional frieze of female figures, of which remains were found in the Second Palace at Tiryns,[5] belonging to a distinctly later date, even this record has disappeared, though in minute details of ornament, such as the scale patterns on the ladies' dresses, the decorative elements of the Knossian models were in some cases very faithfully reproduced.

These comparisons of the background treatment may be thought to indicate for the 'Procession Fresco' a place intermediate between the earlier and later group of wall-paintings referred to above.

Embroidered patterns: compared with 'Ladies in Blue'.

Some interesting comparative materials are also supplied by the patterns embroidered on the robes of both the male and female figures in the present series. These patterns, of which specimens are shown in Fig. 456, are supplemented in Fig. 457 by two taken from the robes of the 'Ladies in Blue' probably of M. M. III *a* date, which, however,

[1] See above, Coloured Plate XII.

[2] *P. of M.*, i, p. 715, Fig. 538.

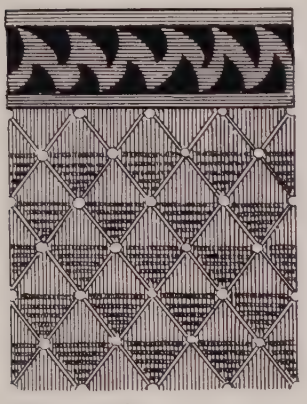
[3] See above, p. 600 and Fig. 373.

[4] G. Rodenwaldt, *Fragmente Mykenischer Wandgemälde* (*Ath. Mitth.*, 1911), p. 242, Fig. 3 (found at Tsuntas in 1886). Restored, with further fragments discovered by the British School; W. Lamb, *B. S. A.*, xxv, Pl. XXVII, and p. 164 seqq.

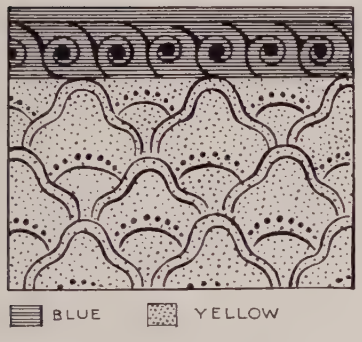
[5] G. Rodenwaldt, *Tiryns*, ii, pp. 69–94. Compare Pl. VIII.

present certain comparative features. The network of Fig. 457, *a*, here appears as a textile motive.

For further comparison there is also given here in Fig. 458 a pattern from the painted relief of a female figure found by Mr. Seager in Pseira, in a L. M. I *a* ceramic medium. The interlacing scrolls in this case betray a reminiscence of these on some Middle Empire scarabs.



a



b

Fig. 457. Patterns on Robes of 'Ladies in Blue'.

It will be seen that the upper border of a pattern (Fig. 456, *a*), repeated on the lower flounces of the facing Goddess (Fig. 450, B), is clearly suggested by the triglyph and half-rosette friezes above described,[1] which have been shown to have an underlying religious significance. On the lower fringe of the long priestly robe worn by No. 4 again we recognize the sacral 'notched plume' ornament that marks the votive arrow plumes of the Temple Repostories and the wings of sacral monsters, such as Griffins and Sphinxes.[2] It is already found as an element of dress borders on the earlier series of frescoes representing the 'Ladies in Blue' (see Fig. 457, *a*).[3]

Influence of inlays on patterns of embroidery.

Neither of these types, it will be observed, is of textile origin, and the same must be said for the scale pattern, Fig. 456, *b*, from the kilt of the male figure, No. 20, and for the variant form, Fig. 457, *b* from a 'Lady in Blue'. Scales are in fact a common type of Minoan faïence inlays, illustrated already by the 'Town Mosaic'.[4] The more or less cruciform motives—Fig. 456, *c*, from the kilt of the processional figure, No. 21, and *d* from that of the 'Cup-bearer'—also correspond with a typical class of inlays. A three-limbed variety was also used in faïence mosaics.[5]

[1] See above, p. 591 seqq.

[2] See *P. of M.*, i, p. 548 seqq.

[3] *Op. cit.*, p. 545, Fig. 397.

[4] *Op. cit.*, p. 309, Fig. 228, *i*, *j*, and cf. pp. 312–13. Some show the double-axe sign in relief on their lower surface. Faïence inlays in the shape of scales also occurred at Phaestos. L. Pernier, *Mon. Ant.*, xii, pp. 93–4, Fig. 28, *a*, *b*. These have incised signs on their lower surface.

[5] See *P. of M.*, i, p. 451, Fig. 324 (from Sixth 'Kasella' of 'Long Gallery': M. M. III *b*).

The incurved lozenges, which in Fig. 456, *d* and *e*, form centre points of the pattern, lead us to another well-marked class of such inlays. They are naturally formed by the interstices between juxtaposed disks, and specimens in native faïence and crystal are found as separate elements of mosaic in deposits, dating from the close of the Third Middle Minoan Period, and the succeeding transitional phase, at Knossos and elsewhere.[1] The little rosettes seen on the descending band of the gaberdine worn by the processional figure No. 4 have the same affinity with inlays.

Fig. 458. Pattern on Female Dress, Painted Relief, Pseira.

The history of inlays in faïence and white shell goes back very far in Crete,[2] and their origins in the Island doubtless connect themselves with the Early Nilotic influences traced above.[3] These, indeed, were later reinforced by an indirect overseas connexion with the Mesopotamian lands, which, owing to the handy supplies of bitumen, had been the original home of the Art in remote Sumerian days.[4] At the same time, the close inter-relations with Egypt under the New Empire, where motives derived from similar intarsia and mosaic work were adopted wholesale in ceiling decoration, make it difficult to say how far in individual cases the patterns seen on the robes of these Minoan figures may not have been taken over from the secondary painted models existing on that side. In one instance, indeed, the correspondence in detail is so great that a direct indebtedness on one side or the other must be admitted.

Identity of pattern on Minoan dress and Egyptian ceiling.

The pattern shown in Fig. 469, *a*, taken from the flounced dress of a female figure in one of the Hagia Triada frescoes is substantially identical with a ceiling decoration of the Tomb of the scribe Amenemhêt at Thebes, belonging to the earlier part of Thothmes III's reign,[5] here given for com-

[1] See *P. of M.*, i, p. 481, Fig. 344 (Temple Repositories), p. 483, Fig. 346 (Fourth Shaft Grave I), and *ibid.*, p. 482 (on lid of ivory box from Tylissos). In the centre of the rosettes of the 'Royal Draught Board' they are formed of crystal set on a *kyanos* backing. Part of another crystal example was found in the 'Room of the Throne' (*op. cit.*, p. 472).

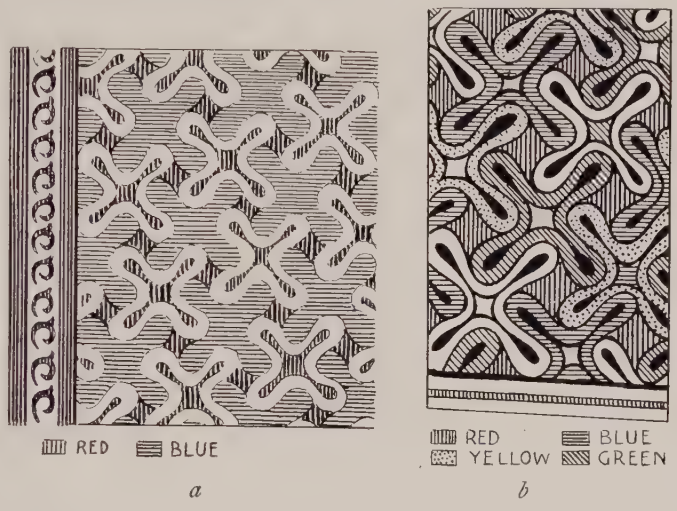
[2] For proto-Palatial specimens from 'the Vat Room' Deposit, see *P. of M.*, i, p. 169 and Fig. 120 (*ibid.*, p. 474, Fig. 338).

[3] See above, § 34.

[4] See above, pp. 262–4.

[5] *The Tomb of Amenemhêt; copied in line and colour by Nina de Garis Davies and with explanatory text by Alan H. Gardiner, D.Litt.* ('The Theban Series': E. E. F.), Pl. XXXII, D, and pp. 12, 13. It is also illustrated in Jéquier, *Décoration égyptienne*, Pl. XXVIII (42), where, however, 'the omission of the much faded black lines entirely alters the design'. The tomb contains a stela of the

parison in Fig. 459, *b*. The Hagia Triada frescoes show strong affinities with those of the 'House of the Frescoes' at Knossos which belong to the 'post-seismic' phase of M. M. III *b*. It is difficult, therefore, to bring down the date of this example later than the middle of the sixteenth century B. C. The ceiling of Amenemhêt, on the other hand, is not earlier than the beginning of the fifteenth. It belongs to a time when, as we have seen, the L. M. I *b* ceramic style was prevalent in Crete and is separated from the fresco in question by the whole duration of the earlier phase, *a*, of the First Late Minoan Period.



a *b*

Fig. 459. *a*, From Flounced Dress of Hagia Triada Fresco; *b*, from Ceiling of the Tomb of Amenemhêt.

It must be said that in these examples a fair case may be made out for seeking the original of both these two kinds of patterns on the Cretan side. The design itself fits on the 'cruciform' class exemplified by Fig. 456, *d* and *e*, and its coiled border is of a characteristic M. M. III type. On the other hand, the Amenemhêt ceiling presents, for Egypt, a quite exceptional style of ornamentation.[1] The earlier dating—by about two generations—of the Cretan specimen certainly favours its claim to be the original. It supplies, at any rate, another instance of the formation of a decorative style in the early days of the New Empire common to the two areas, and to which, as suggested above,[2] the title 'Egypto-Minoan' may appropriately be given.

The network pattern of Fig. 456, *c*, from the kilt of the processional youth, No. 21, brings us to another class of these embroideries. The intersections of the filament pass through globular beads, and, suspended from

The network patterns.

28th year of Thothmes III (1473 B. C.). The parallelism with the Hagia Triada figure was already noted by G. Rodenwaldt (*Jahrbuch d. deutschen Arch. Inst.* 34 (1919), pp. 103, 104).

[1] *Op. cit.*, p. 12. Dr. Alan Gardiner, *op. cit.*, p. 12, remarks that it shows 'a style of ornamentation that I have not noticed elsewhere'. For the Cretan S-scrolls on another ceiling of the Amenemhêt tomb, see above, p. 205, and note 1.

[2] See above, p. 205 seqq.

these, are what from their orange colour must be taken to be intended for gold jewels. In Fig. 457, *a*, from the robe of a 'Lady in Blue', we see a similar network[1] with beads at its intersections, and with cross-threads occupying the lower halves of the lozenge-shaped meshes, presenting thus an exact parallel to the ornamental nets that hang down over the front of the kilt in the case of male figures belonging to the 'Procession Fresco' (see above, Fig. 453, *a*). Thus in the earlier fresco, representing the antecedent structural phase of the Palace, we find one of the ornamental nets of Minoan apparel literally copied.

The network designs of the 'Procession Fresco' bring us thus into a close relation with types in existence in the 'pre-seismic' stage of M. M. III. More general parallels have already been established with the cruciform pattern shown in Fig. 459, *a*, from Hagia Triada.

Place of 'Procession Fresco' early in 'New Era'.

These decorative affinities, and such survivals of the old tradition as may be traced in the conventionally rendered descending rock-work and the wavy background, may certainly enable us to claim for the 'Procession Fresco' a relatively early place among the works of the New Era. This, in itself, does not necessarily oblige us to carry it back to the actual date of rebuilding of this part of the Palace after the great Earthquake. There are, indeed, certain considerations that might be taken to weigh in favour of a somewhat later date. These largely rest on the intimate relationship, illustrated below, between the subjects of the present frescoes and those of the wall-paintings in a series of tombs of high officials of Thothmes III's time, depicting Minoan envoys and their offerings.

That the men of 'Keftiu' seen in the wall-paintings of these Theban tombs were of Cretan stock has already been sufficiently demonstrated.[2] Physical appearance and costume alike proclaim their Minoan origin, though it is by no means impossible that they had planted intermediate factories in Cyprus and on the opposite Cilician coast. By those who preserved the Egyptian records they are much mixed up with Syrians and with Anatolians of Hittite kin, but, apart from occasional confusions, the vessels that they bear to Pharaoh's viziers are of Minoan types, and have, as has been shown above, received many illustrations from the bronze and other metal objects brought to our knowledge by the discoveries on the site

[1] Fragments of a similar pattern also made their appearance among the earlier fresco remains in the style of the 'Ladies in Blue', under the 'Corridor of the Procession'. Scale pattern also occurred there very like Fig. 456, *b*. For similar net patterns see, too, the faïence figure, *P. of M.*, i, p. 502, and the 'Fitzwilliam' statuette.

[2] See above, p. 654 seqq. and cf. p. 534.

of Knossos. The correspondences, indeed, are such that the Theban pictures may actually serve to supplement our knowledge of the precious relics borne by the processional figures of the Knossian frescoes.

The period to which these Egyptian wall-paintings belong opens over a generation later than the great seismic overthrow at Knossos towards the end of M. M. III *b*.

Was it an original element of restored building?

On the other hand the general trend of the evidence afforded by the excavation itself might seem to favour the view that the processional frescoes had belonged to the original elements of the walls of the restored building. It is certain that wherever we turn, whether in the Corridor of the Procession or in the adjoining Propylaeum, the latest sherds found beneath the floors or in the interstices of the walls proved consistently to belong to the 'pre-seismic' M. M. III *b* class, without any admixture of L. M. I *a*. Nor was there a trace of any intermediate system of painted stucco decoration such as might have filled the gap existing between this processional series and the 'Ladies in Blue' of the underlying stratum.

That this part of the Palace site had remained derelict for over a generation after the great seismic catastrophe that took place towards the end of the concluding phase of M. M. III is, itself, a highly improbable supposition. In the midst of all the building activities that succeeded this widespread overthrow—with new houses springing up all around, and with every sign of renewed prosperity—is it conceivable that the principal entrance avenue of the Palace itself and the adjoining halls should have been left for such a space of time a heap of ruins? And if it had been so left, amidst the thriving urban elements all around, would not L. M. I *a* sherds representing the ceramic style in vogue still have infallibly found their way to a perceptible extent into the foundations and beneath the floors of the new structures?

The idea of a hiatus in the Palace history of anything like this extent can hardly be entertained.

Hint of intermediate dado system in 'Corridor of Procession'.

One significant circumstance, however, must yet be recorded, which, though of isolated occurrence, may possibly have had a more general bearing. It has already been mentioned that when the original passage South from the West Porch was widened, in accordance with the new plan adopted at the time of the great rebuilding after the earthquake, this was effected by throwing back its Eastern wall-line, the old limestone blocks of these having been seemingly re-used. But on the new line, about six and a half metres South of the left entrance jamb of the Corridor, a fragment of the lower part of a gypsum dado slab was found adhering to the base of one of

these blocks and partly covered by the later stucco belonging to the date of the 'Procession Fresco'. That the block was moved back to its later position with the gypsum fragment attached to it is not a very probable supposition, and, in default of this, we may here recognize a still surviving indication that gypsum dadoes formed a part of the earliest scheme of wall decoration in this section of the building, possibly of a provisional nature, and which has certainly left no other trace either here or in the adjoining South Propylaeum to which the 'Cup-bearer Fresco' belongs. The processional frescoes reaching down to the pavement level would in this case represent a scheme of decoration carried out at a somewhat later date. The evidences already given of a partial destruction of the town-houses of Knossos at an epoch corresponding with the mature L. M. I *a* ceramic stage might possibly account for this work of redecoration. But, on the whole, it seems best to leave this question an open one.

Minoan Tributaries from Keftiu and the 'Isles of the Sea' on Wall-paintings of Theban Tombs of Hatshepsut's and Thothmes III's time.

Tomb of Senmut.

The range of the 'tributary' scenes displayed in the chamber tombs of the Viziers and principal officers of Thothmes III in the Valley of the Egyptian Thebes may itself well go back to the last two decades of the sixteenth century B. C. These tombs may be divided chronologically into an earlier and a later group. First in order in the earlier group is that of Senmut,[1] the great Architect and Director of Works of the Queen Mother, Hatshepsut, who was already playing a leading part when Thothmes III was still an infant. As the chief officer and 'Lord Privy Seal' of the Great Queen, 'the companion greatly beloved', and tutor of her daughter Neferu-ra, his activities may well begin with the early days of her co-regency and a date approaching 1516 B. C. His tomb, of exceptional magnificence, high up in the most prominent place of the Theban Necropolis, would also, in all probability, have been the work of his prime.[2]

The Vizier User-amon, illustrations from whose tomb have been given above,[3] belongs to the beginning of the fifteenth century B. C. and to the early part of Thothmes III's reign. It is observable that on the walls of both of these tombs the Minoan emissaries are depicted with the traditional form

[1] See above, p. 425, and note 1.

[2] W. Max Müller, *Egyptian Researches* (1904), p. 18, would fix 1500 B. C. as the approximate date of Senmut's tomb. But it seems probable that (after the manner of the Pharaohs themselves) so high an official, when once he had arrived at the summit of power and wealth, would have used his position to insure a fitting abode for his after life.

[3] See above, pp. 534–6 and Figs. 337, 338.

of loin-clothing in which an imperfectly understood copy of the Cretan *penistasche*—analogous to the 'Libyan sheath'[1]—appears in front of the girdle (see Suppl. Pl. XIII). According to the Minoan fashion a band of the loin-cloth was drawn up between the legs over the envelope. But in

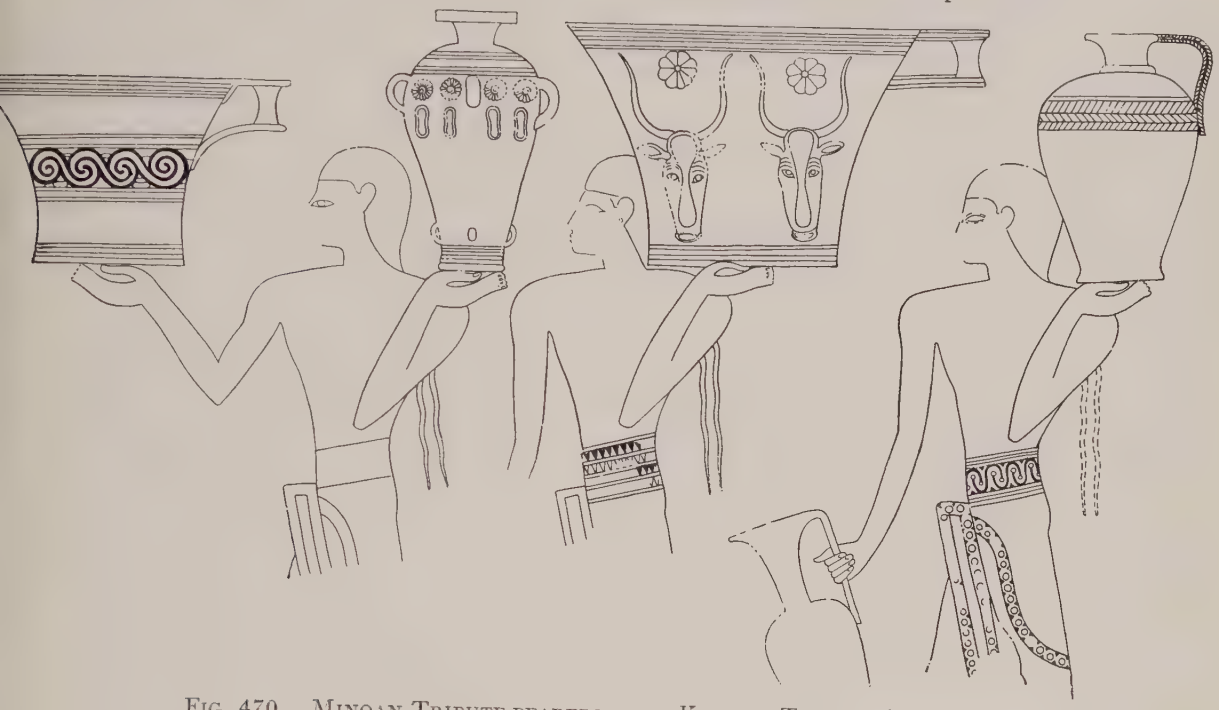


FIG. 470. MINOAN TRIBUTE-BEARERS FROM KEFTIU: TOMB OF SENMUT.

these cases there is no trace of such a band, and the Egyptian artist, misled by the Libyan arrangement with which no doubt he was better acquainted, suggests that the whole was dependent on the front of the girdle.

Fig. 470 from the Tomb of Senmut[2] presents the well-known group of Minoan envoys, the first and second of whom bear cups (greatly enlarged) of the Vapheio shape, while the first and third carry characteristic metal vases, that borne by No. 1 resembling the 'pithoid amphora' type described above,[3]

[1] See A. E., *The Early Nilotic, Libyan, and Egyptian Relations with Minoan Crete* (*Huxley Memorial Lecture*; *R. Anthr. Inst. Journal*, 1925), p. 21, Figs. 19, 20, and cf. pp. 34, 35, above.

[2] Figs. 470 and 471 are from Mrs. N. de Garis Davies's drawings, *Bulletin of the Metropolitan Museum of Art, New York; The Egyptian Expedition*, 1924–5, p. 42, Fig. 1, and p. 43, Fig. 2. A good heliotype was published by W. Max Müller, in *Egyptological Researches* (1906), Pl. 5. For a coloured illustration see *B. S. A.*, xvi, frontispiece from a coloured photograph by Mr. Robert Mond. For R. Hay's drawing about the year 1837, see Dr. H. R. Hall, *An Addition to the Senmut Fresco*, *op. cit.*, p. 254 seqq., and Pl. XIV.

[3] See p. 422 seqq. and Figs. 244–8.

while the Knossian parallels to the silver and copper ewer on the shoulder of No. 3 have already been pointed out.[1] The misconceived Minoan loin-clothing is well shown by the third figure.

In the User-amon group (Fig. 471), the first 'tribute-bearer' holds a bull's head 'rhyton' of the Minoan ritual class,[2] the second a silver ewer

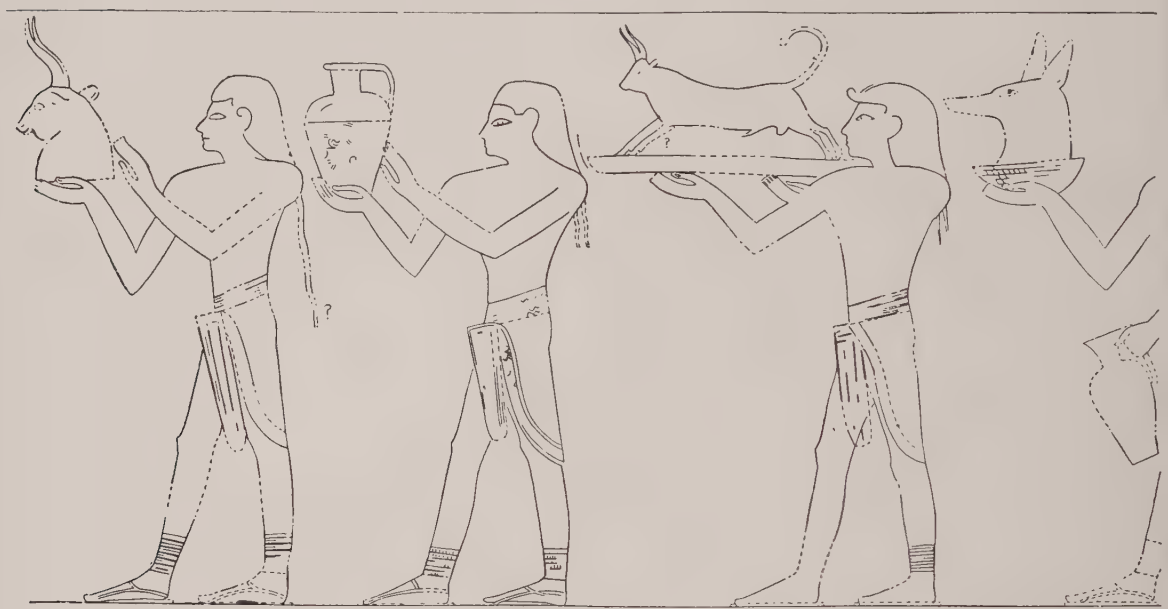


FIG. 471. MINOAN TRIBUTARIES FROM KEFTIU: TOMB OF USER-AMON.

Tomb of User-amon.

with coil decoration on the lower part of the body, the third a silver figurine of a galloping bull recalling the bronze example illustrated for comparison above;[3] it stands on a salver of the same metal. The jackal's head—also doubtless a 'rhyton'—borne on a bowl by the last of the series seems, from its white ground with yellow patches, to have been of silver with gold inlays. What appears to be a jackal's head also occurs among the vessels from Keftiu on the Rekhmara Tomb,[4] and in the hands of a Minoan 'tributary' in that of Men-kheper'ra-senb.[5] Jackals, though not found to-day in Crete, are still widely distributed in the East Mediterranean regions, and even occur on some Dalmatian Islands.

A wall-painting in low relief in the Tomb of Puemra,[6] who also belongs

[1] See above, pp. 425, 426, and Fig. 246.

[2] See above, p. 527 seqq., and p. 536, Fig. 340.

[3] See p. 651 above, and Fig. 416.

[4] See above, p. 535, Fig. 339 (upper row to right).

[5] W. Max Müller, *Egyptian Researches*, ii, Pl. XI, 1.

[6] N. de G. Davies, *Liv. Anns.*, vi (1914), p. 84 seqq., and Pl. XVIII, and more fully in

to the earlier series and was 'Lord Privy Seal' and Second Priest of Amon during the co-regency of Hatshepsut, already illustrates another type of loin-clothing in which a kilt or short apron appears, covering the upper part of the thighs both before and behind, and substantially identical with that of the Cup-bearer and his fellows. The Minoan youth—who is seen in company with three other foreign princes, one a Semite—is distinguished by the dark red colour of his skin and his long waving hair falling over breast and shoulders, and with the coiling lock over the forehead shown in a modified shape like a sprouting horn (Fig. 472).[1] The nose here is of a decidedly aquiline form, but this may have been partly taken over from the neighbouring Semite profiles. Tomb of Puemra.

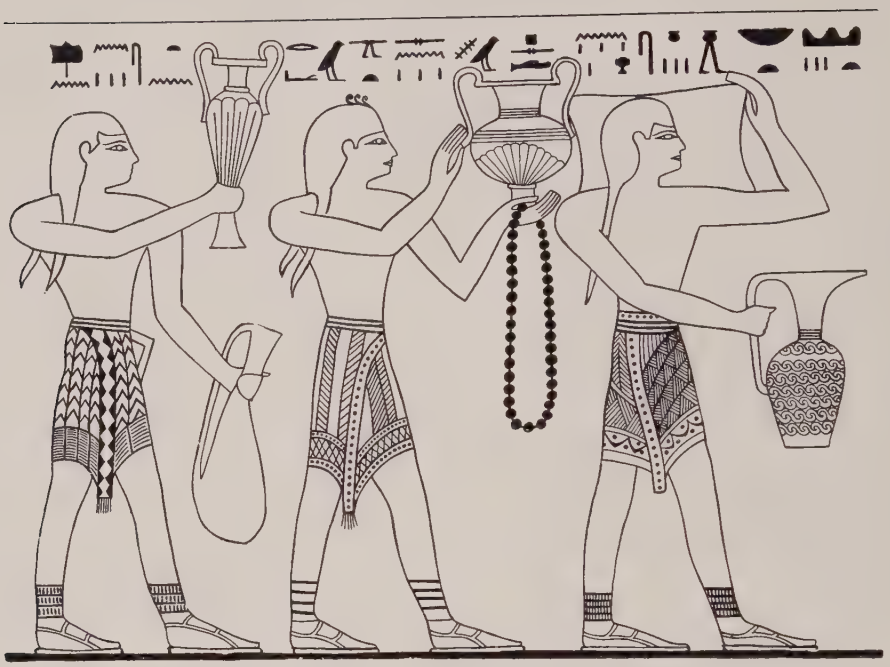
Fig. 472. Minoan Envoy in Kilt: Tomb of Puemra.

It is this costume which becomes general in the wall-paintings of the later group of tombs depicting the Minoan 'tribute-bearers'. Curiously enough, however, the Egyptian artists who executed these in many cases began the representation of the figures as girded in the same manner as those of the Senmut and User-amon tombs, and afterwards, without wholly erasing this feature, endeavoured to make the costume up to date by substituting the kilt. This is well illustrated by the effigies of the most magnificent of all these tombs, that of Rekhmara,[2] the nephew of User-amon, who held the office of Vizier of Upper Egypt from the thirty-second year of Thothmes III to his death (*c.* 1471–1448 B. C.). Tomb of Rekh-mara.

his *Tomb of Puemré*, vol. i (Tytus Memorial, 1922). It is No. 779 of E. Meyer, *Darstellung der Fremdvölker*. See, too, D. Fimmen, *Die Kretisch-Mykenische Kultur* (2nd ed. by G. Karo, 1920, pp. 183, 184).

[1] Fig. 472 is taken from Mr. N. de G. Davies's admirable coloured representation in the frontispiece to his *Tomb of Puemré*, vol. i.

[2] See Percy E. Newberry, *The Life of Rekhmara* (1900). Unfortunately his copies



a *b* *c*

d *e* *f* *g*

FIG. 473. MINOAN TRIBUTE-BEARERS FROM KEFTIU: TOMB OF REKHMARA.
(BY P. E. NEWBERRY.)

Sixteen envoys from Keftiu are here depicted, of which two groups of three and four, respectively, are given in Fig. 473, *a–c*, and *d–g*. These are seen advancing towards a massed array of offerings, an inventory of which is being taken down by an Egyptian scribe, including ingots and 'rhytons' with animal's heads illustrated above.[1] Other rhytons of conical shape, though not so high as that of the Cup-bearer, are here repeated. Among the metal vessels borne are high fluted and pedestalled vases with a handle curving up on either side (*a*), and another type of the *prochous* kind with a single handle and the body covered with a spiraliform decoration (*c*). The *oenochoê* held by *d* greatly resembles the bronze example found in the Byblos tomb, illustrated above.[2] Other forms of vessel, such as the broad pedestalled flower bowls with lotus buds and flowers rising above their rim (Fig. 473, *d*, *g*), are well-known Egyptian fabrics,[3] and the bronze sword with a blunt point, for cutting rather than thrusting, held by *e* is also non-Cretan.

Minoan types of vessels.

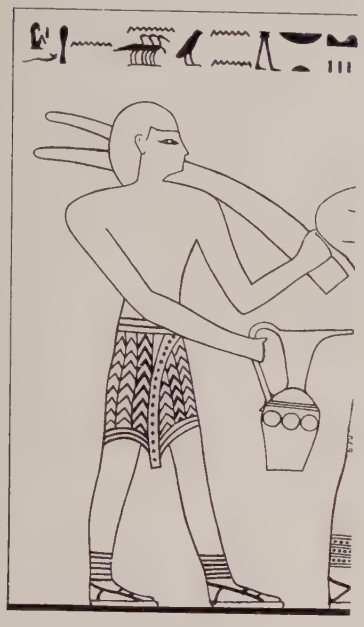


Fig. 474. Minoan Tributary carrying Elephant's Tusk: Tomb of Rekhmara.

The curls rising above the heads of several of these figures are very characteristic of the Minoan *coiffure*, and the band or diadem is also found, though it is also a Semitic feature. Most remarkable is the horn rising above the ear of *f*. It is not fixed to a helmet like that on a fragment of a faïence vessel from Mycenae or those of the later Shardana and of the 'Warrior Vase'.

Curls and horn.

The far-reaching carrying trade of the Minoan merchants is attested by

of the tributary scenes have not been published, and I am thus the more indebted to the author for favouring me with proofs of these. The figures are photographically reproduced in *Darstellung der Fremdvölker*, Nos. 772–4. Suppl. Pl. XXVIII is taken from a photograph of a drawing by Mrs. N. de G. Davies. See, too, Dr. H. R. Hall, *Keftiu and the Peoples of the Sea* (*B. S. A.*, viii, pp. 163–5). Cf., too, D. Fimmen, *op. cit.*, pp. 182, 183. For the inscription (mentioning 'the tribute of Keftyew') see Breasted, *Ancient Records of Egypt*, ii, 761. Ph. Virey's *Tombeau de Rekhmara* (*Mémoires de la Mission Française au Caire*, v, 1er fascicule), Pl. V, is wholly untrustworthy, nine out of sixteen figures being copied erroneously.

[1] See above, p. 535, Fig. 349.

[2] See above, p. 656, Fig. 421.

[3] They are seen in course of manufacture in a goldsmith's workshop (Davies, *Tomb of the two Sculptors* (*Tytus Memorial*, iv), p. 62 and Pl. XIV?).

Elephants' tusks borne by Minoan 'tributaries'.

the bronze ingots borne by three of the figures, and by the elephant's tusk, which here, as in the case of the Men-kheper'ra-senb wall-paintings, is held by the hindmost of the train (Fig. 474).[1] An interesting trophy of ivory tusks is to be seen on a decorative fragment of fresco in the finest 'miniature' style found on the North border of the Palace (Fig. 475). The tusks—white in contradistinction to the others—are laid across an ox's head, suggestive of the land transport of the material to Knossos from its Southern port at Komò. The quantities of ivory seals of Early Minoan date found in the primitive *tholos* tombs of the Messarà district, together with relics of proto-Libyan tradition might itself suggest that Crete had already drawn its ivory supply from the African side. In a deposit, moreover, at Phaestos, belonging to the close of the Neolithic or the very beginning of the Early Minoan Age, there occurred part of the base of an elephant's tusk,[2] attesting the importation of the raw material, doubtless from the African side. It seems quite possible, indeed, that the African elephant, which in Pleistocene times ranged as far as Britain, may have survived in the Cis-Saharan regions opposite Crete in the second millennium before our era.

Ox-head with tusks: miniature fresco.

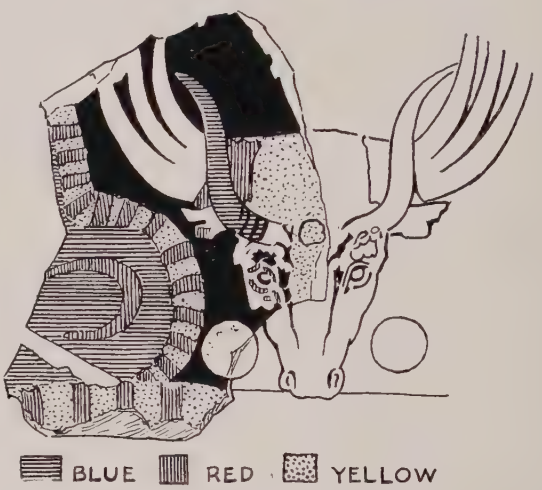


FIG. 475. DECORATIVE TYPE OF OX-HEAD WITH ELEPHANTS' TUSKS: MINIATURE FRESCO, KNOSSOS.

Was African elephant known to Minoans?

H. Triada 'poncho'.

It is by no means improbable that at the epoch to which the 'Procession Fresco' belongs, the Minoans still had knowledge of the African species. It is tempting, even, to ask if the curious hides that cover the youths on the well-known steatite cup from Hagia Triada in 'poncho'-like fashion[3] (Fig. 476) may not be the spoils of elephant hunters returned from the opposite coast. The hides themselves are so stiff that their rounded contour behind resembles the hind-quarters of a young African elephant shown in Fig. 477.

[1] It is probably through a mistake in draughtsmanship that the end of a second tusk is seen behind.

[2] Mosso, *Le origini della civiltà Mediterranea*, p. 34, and Fig. 17, A.

[3] Dr. K. Müller, *Frühmykenische Reliefs* (*Jahrb. d. d. Arch. Inst.*, XXX, 1915, p. 246), compares the great mantles of the Yuruks, which are of stiff felt. Paribeni (*Rendiconti dei Lincei*, XII, 1903, p. 324) regarded the objects as shields, and the whole as a military procession.

Herds of Asiatic elephants in North Syria.

Egypt, as we know, drew its ivory supplies from the Asiatic side as well as from Ethiopia and the Soudan. Great herds of the Asiatic breed were hunted by Thothmes III in Northern Syria. Thanks to the growing intercourse between Crete and Syria in the 'Age of Palaces' it is likely enough that, in later days, a large part of the ivory supply was of the Asiatic variety. Loads of tusks may have also found their way into Egypt from the Syrian ports in Minoan bottoms, and it is quite possible, therefore, that the Minoan envoys here depicted had obtained them from that source.

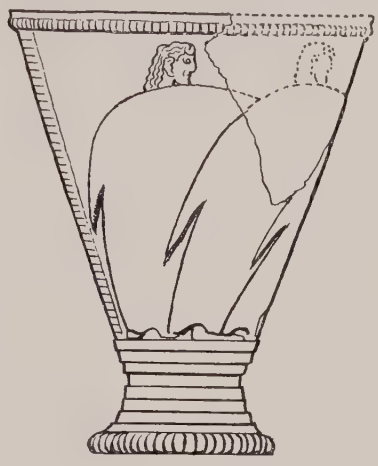


Fig. 476. Relief on Steatite Cup: Hagia Triada.

Many of the figures bear traces of the insertion of the sheath envelopes of the earlier costume depicted in the Senmut Tomb. In two cases the kilt consists of a spotted skin of a pard (cf. Fig. 473, *f*), but with this exception all show the same short loin-cloth. At times there is a band hanging down from the middle of the belt (Fig. 479), the fringed end of which suggests a comparison with the beaded ends of the network pendant seen in the same position in the case of the Cup-bearer and his fellows.[1] The fringe of pendent beads in this case extends

Fig. 477. Hind-quarters of Young African Elephant.

Fig. 478. Young Prince attacking Sphinx, showing Tasselled Robe: Thisbê Treasure.

Minoan kilt from Rekh-mara

along the whole border of the kilt, and tasselled strings hang down from the back of the girdle. These tassels and pendants recall a fashion

[1] From Professor P. E. Newberry's reproduction.

tomb with tassels and pendants.

much in vogue on a series of gold intaglios belonging to the Thisbê Treasure,[1] where, however, the garment itself is a short-sleeved close-fitting tunic, according to the Mainland usage. A good example of this is supplied by the intaglio showing the young prince attacking the Sphinx[2] (Fig. 478)—a remarkable anticipation of the Oedipus story. The approximate date of the Thisbê jewels, determined by internal evidence,[3] is the first half of the fifteenth century B. C., thus agreeing with that of the figures on the walls of the Rekhmara Tomb, which seem to represent the specifically Cretan form of the prevailing fashion.

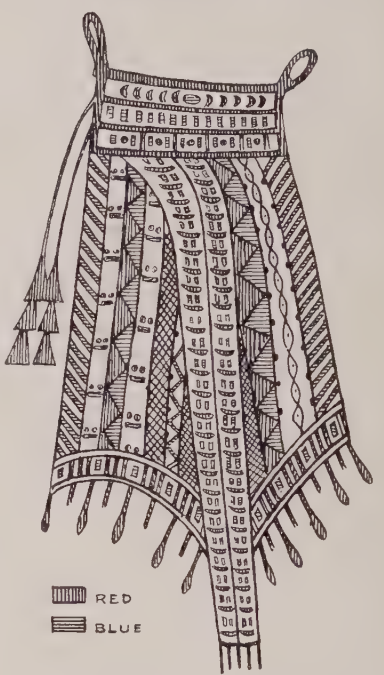


FIG. 479. TASSELLED KILT OF MINOAN 'TRIBUTARY': REKHMARA TOMB.

Spiraliform patterns.

Of the patterns of the cloths it is to be remarked that the Egyptian artist, though he may have had Minoan samples before him, has in several cases had recourse to spiraliform or coiled motives not found on the remains that we possess of the 'Procession Fresco', except, indeed, in connexion with the metal belts. Such scrolls, however, recur on the bodice of the faïence figure of the Snake Goddess.[4] The foliate sprays are also new. Many of the patterns are of a vague geometrical kind and are also depicted on the clothes of Syrians and other foreigners.

Twelfth Dynasty, &c., *waz* pattern.

In one case, at any rate—the most definite design of the whole series—the motive is clearly Egyptian. It will be seen that Fig. 480, *b*, from the kilt of a Minoan of the Rekhmara Tomb is identical in its main scheme with the decoration of the doorway of the inner room of the Tomb-chapel of Ukh-hotep at Meir (Fig. 480, *a*), who executed it in the reign of Amenemhat II.[5] In one form or another, indeed, the motive is common to a series of scarab types (cf. Fig. 481, *a*, *b*, *c*, *d*),[6] ranging from the Twelfth to the

[1] See, A. E., *Ring of Nestor, &c.* (*J. H. S.*, 1925, and, separately, Macmillans), p. 26 seqq. and Figs. 29, 31–4, 38, 39.

[2] *Op. cit.*, p. 27, Fig. 31.

[3] *Op. cit.*, p. 33 seqq. The new dual form of chariot body had not yet appeared.

[4] *P. of M.*, i, p. 501, Fig. 359.

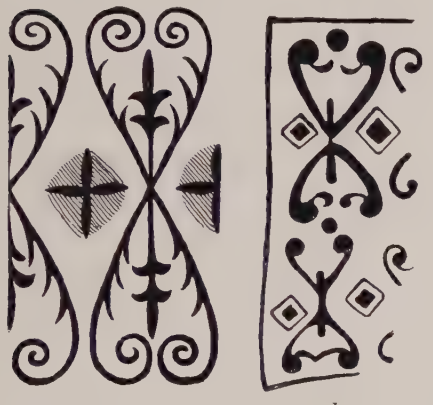
[5] See A. M. Blackman, *The Rock Tombs of Meir*, Part iii, Pl. XXVIII, and p. 10, &c.

[6] Fig. 480, *a*, *d*, Newberry, *Scarabs*, Pl. XVIII, 17 (with *waz*), and Pl. XIX, 36 (with lotus buds), *b*, *c*, Petrie, *Kahun, Gurob, and Hawara*, Pl. X, 35 (with *waz*) and 39.

Eighteenth Dynasty, and is often seen to be compounded with the sacred papyrus wand (*waz*) and lotus buds.

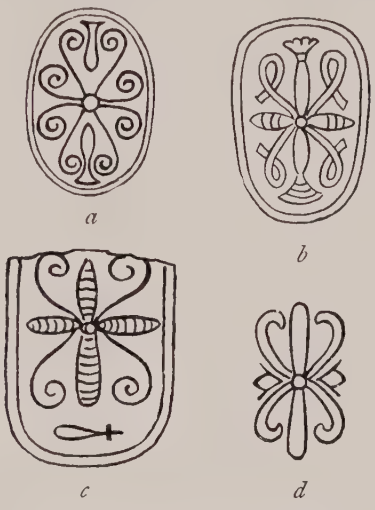
Minoan tribute-bearers of tomb of Men-kheper-ʿra-senb.

Fine illustrations of these Aegean foreigners are also to be seen on the tomb of Rekhmara's eldest son Men-kheperʿra-senb who was High-Priest of Amon, Architect and 'Chief of the Overseers of Craftsmen', also during the latter part of Thothmes III's reign.[1] The yellow, short-bearded personage who grovels here at the head of the deputation, and who seems



a *b*

Fig. 480. *a*, From Tomb Chapel of Ukh-hotep, at Meir; *b*, on Kilt of Man of Keftiu, Rekhmara Tomb.



a *b* *c* *d*

Fig. 481. Patterns on Scarabs, XIIth to XVIIIth Dynasty.

to represent a Bedouin,[2] by a strange blunder of the Egyptian artist has been labelled 'Prince of Keftiu'. All the chieftains, indeed, depicted, including the Princes of Khatti—the Hittite Country—of Tunep, near Aleppo, and of Kadesh at the head of the second row, are Asiatics. But the members of the tribute-bearing train that follows after the Prince of Tunep are purely Minoan, both in attire and in bodily form (Fig. 482).[3] They show the deep-red flesh tint, the well-formed nose, and the hair sometimes with the characteristic curls in front of the head, and falling down behind as separate

[1] E. Meyer, *Fremdendarstellungen*, 596–600; W. Max Müller, *Egyptian Researches*, ii, p. 1 seqq., and Plates I–XXII. For Virey's misleading reproductions (*Mission au Caire*, v, 2, 1891, p. 197 seqq.), see above, p. 535, n. 3.

[2] W. Max Müller, *Egyptian Researches*, ii, p. 19, and Pl. VIII, and cf. E. Meyer, *Fremdendarstellungen*, 596. His kilt, however, and that of the Prince of Khatti may be confused versions of the Minoan.

[3] From a sketch by Mrs. N. de Garis Davies, for which I am indebted to Dr. Alan Gardiner's kindness.

locks about the shoulders and back.[1] The bull's head 'rhyton', with its cruciform spots, and the fine figurine of the standing bull—both of silver—borne by the first two figures, have already been described.[2] The cup, with the bull's heads held by the third tributary, shows analogies with one of Vapheio type in the Senmut series,[3] and the ewers and amphoras of

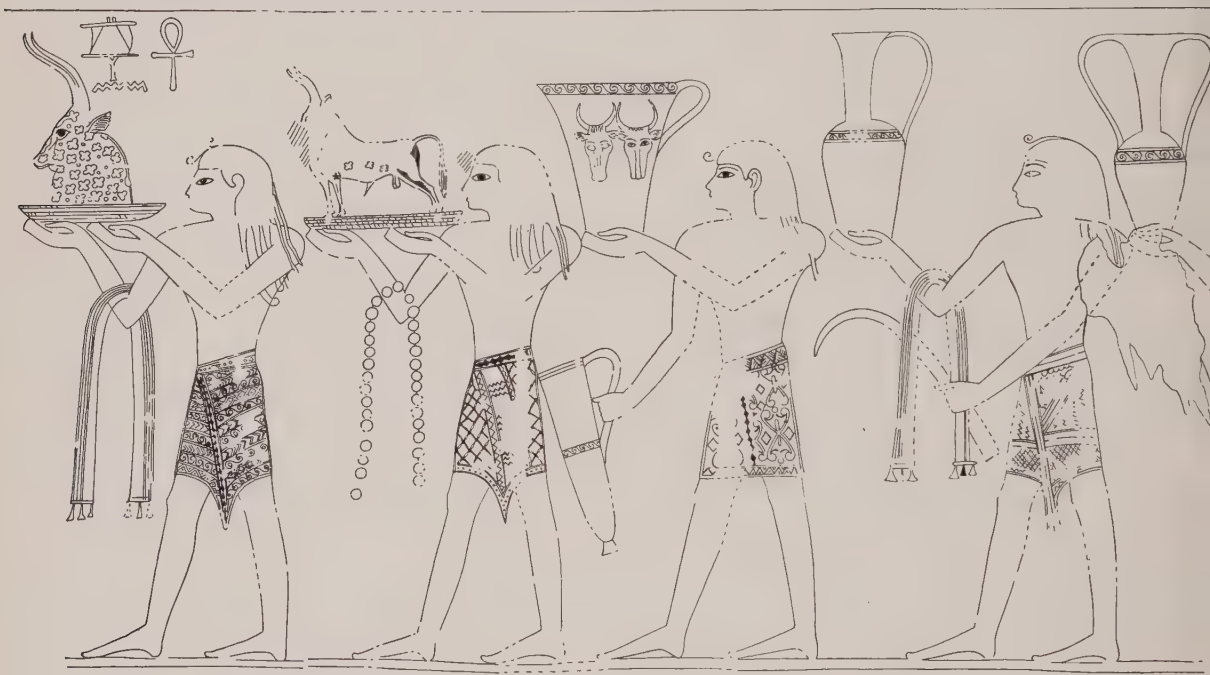


FIG. 482. MINOAN TRIBUTE-BEARERS FROM TOMB OF MEN-KHEPER'RA-SENB.

various metals, as well as the bronze 'filler' carried by the succeeding figures, may well represent Cretan vessels. A 'rhyton' in the form of a jackal's head, like those mentioned above, is, however, remarkable from its colour, a deep blue or black, in which Dr. W. Max Müller would recognize iron.[4] The last Minoan figure bears a fluted two-handled vase of bronze with a bronze bull's head above it, showing in this case irregular black spots.[5]

This whole group of tributaries is, here, too, preceded by rows of

[1] The third tributary in the first row has a short Semitic beard. So, too, in the second row the fourth and seventh figures are bearded and have their hair filleted in Syrian fashion.

[2] See above, p. 536, Fig. 340, *b*, and p. 649, Fig. 413, *b*.

[3] See above, p. 536, Fig. 340, and p. 649, Fig. 413, *b*.

[4] *Op. cit.*, p. 25. 'It is of somewhat indistinct black, probably dark blue, so that I suppose it represents iron.'

[5] *Op. cit.*, Pl. XII, 2.

offertory vessels in various metals, one or two specifically Minoan, but some, like a bronze lotus cup, purely Egyptian, and several others of Egyptianizing Syrian types.[1]

Traditional types of 'Keftiu' vases.

Almost all the types are already found in the Rekhmara Tomb. It is further clear that many of the vessels seen in both this and the Rekhmara group go back to forms that we find already current on the walls of the tombs of User-amon and Senmut, the latter of which carries us back to the last decades of the sixteenth century B. C. It has already been pointed out, indeed, that the representations of these tributary gifts bear a close analogy to the trophies of the later Roman Emperors which took their shape from the spoils of earlier ages. The cup with the two bull's heads held by a youth of Men-kheper'ra-senb's tomb is really a variation of the Vapheio type in that of Senmut. The large bull's heads themselves on the vessel bear in fact a distinctly L. M. I *a* stamp.[2] So, too, the remarkable 'pithoid amphora' seen in Senmut's tomb has been shown to be a translation into metal of a characteristic ceramic type that makes its appearance at the very beginning of the Late Minoan Age. The preservation of these traditional types facilitates the comparisons suggested by vessels such as some of those from the Knossian bronze hoards described above of the same early date.

Lacuna in Egyptian evidence.

There seems, indeed, to be a real lacuna in the Egyptian evidence. That, in the age of exceptional wealth and luxury covered by the reign of Thothmes III, we might expect more sumptuous tombs and a greater display of such tribute-bearing processions on their walls is natural enough. It does not seem to be too much to hope that, on a less splendid scale perhaps, similar evidence may be forthcoming in tombs belonging to the earlier phase of the New Empire. Of far-reaching import, indeed, in this relation, is the Egyptian sepulchral relief[3] belonging to the early part of the Middle Kingdom, already illustrated, depicting processional figures of foreigners, probably Aegeans, carrying what seem to have been tin ingots on their shoulders, and who are the true prototypes of the envoys of Keftiu bearing copper ingots on the walls of the Rekhmara Tomb.

Reference to the people of Keftiu, the traditional bearers of Minoan

[1] *Op. cit.*, Plates I–VI. It has already been suggested that the broad pedestalled flower-bowls with lotus buds (Pl. III, 6, 7; Pl. IV, 5) are Syro-Egyptian, as is also probably a two-handled vase with a papyrus stem (Pl. IV, 4). There are also two designs (Pl. IV, 1, 2) of a variation of a common type of Egyptian metal vessel with a movable curved handle (cf. Wilkinson, *Ancient Egyptians*, ii (1878), p. 9, Fig. 276. 1).

[2] Compare the 'pithoid amphora' from Pseira, p. 476, Fig. 284 above (Seager, Pl. VII). Similar designs occurred at Palaikastro, also L. M. I *a*.

[3] See above, pp. 176, 177, and Fig 90.

culture, occur on early Eighteenth Dynasty documents,[1] and, in one case, possibly, even of pre-Hyksos times. Mention of the people of 'Islands in the midst of the Sea', with whom they are coupled and must (up to a certain point in any case) be identified, is also found at an equally early period. But, as we now know, such scanty references as exist stand in the most disproportionate relation to the archaeological evidences of an intensive intercourse of Crete with Egypt going well back into the pre-dynastic Age, and which had attained a remarkable development in the great days of the 'Middle Palace' at Knossos.

Fig. 483. Restored Female Figure: Kadmeion.

We must still recognize, indeed, that in the wall-paintings of these Theban tombs we have, on the whole, in many ways a surprisingly faithful record of the Minoan representatives with whom official Egypt came into contact during the long reign of Thothmes III, very nearly corresponding with

[1] A medical recipe of early Sixteenth Dynasty date, but apparently of earlier tradition (*Pap. Ebers*, 9, 19 and p. 3; W. Max Müller, *Asien und Europa*, pp. 331, 352, herbs of 'Keftiu' are included). In *The Admonitions of an Egyptian Sage* (Alan Gardiner, p. 32), of early Eighteenth Dynasty or pre-Hyksos date, mention is made of 'Cedars . . . with the

Relation of 'Procession Fresco' to Kadmeion freize.

the first half of the sixteenth century B.C. That the 'Procession Fresco' approaches the upper border of this is clear, but its relatively early place can be gathered from the position in which it stands to some processional frescoes of the same class of which remains have been found at Mycenae, Tiryns, and the Boeotian Thebes.

In subject, the full-length figure of a lady, holding a bunch of lilies and a vase of banded material from a room of the Kadmeion at Thebes,[1] comes nearest to our 'Procession Fresco'. It agrees, indeed, in such features as the barred decoration of the flounces and the indication of anklets. Here, too, as shown in the restored representation (Fig. 483), we see a wavy blue band running horizontally across the field. But this conventional background has by now become little more than a reminiscence; the reduplicated borders are wanting, and there seems to be no trace of the curves descending from the upper surface of the field that stood for the original rocky horizon. So, too, the conventional bands of the vessel held by the figure are much farther removed from the natural veins of the variegated rock imitated than those of the Knossian example (Fig. 451, p. 724, above).

The group of Theban wall-paintings from which this is taken unquestionably belongs to the Early Palace, the date of which, judging from the ceramic relics of the site, must go back to the early part of L. M. I *b*—or in other words to about 1500 B.C. Happily, moreover, in the present case, a very precise indication is afforded by the bunch of lilies seen in the right hand of the figure. These exactly correspond with the lilies seen on fragments of a vase of the L. M. I *b* ceramic phase from a tomb of the Kolonaki Cemetery at Thebes,[2] which display in turn a great stylistic affinity with the 'papyrus lilies' on a very fine contemporary amphora from Mycenae[3]

oil of which chiefs are embalmed as far as *Kefatiu*' (cf. G. A. Wainwright, *The Keftiu People of the Egyptian Monuments* (*Liv. Anns.*, vi), p. 24 seqq., p. 29 seqq., and p. 78. Wainwright regards Keftiu land as East Cilicia (p. 33 seqq.), and endeavours rigorously to distinguish them from the People of the 'Isles in the Midst of the Sea'. W. Max Müller includes both Cilicia and Cyprus, &c. (*A. u. E.*, p. 337 seqq.), in the Keftiu territory. On this question, see p. 654, above.

[1] A. D. Keramopoullos, Ἀρχ. Δελτ., iii (1917), p. 339, Fig. 133. Cf., too, Ἐφ. Ἀρχ. 1909, Pl. II. Rodenwaldt, *Tiryns*, ii, p. 93 remarks: 'Der Wechsel des Grundes, Farben, Oberfläche, und künstlerische Qualität weisen diese Reste dem Stil des älteren Palastes von Tiryns zu.' In the *Jahrbuch d. deutschen Arch. Inst.* (xxxiv, 1919), p. 99, n. 2 he calls attention to the indebtedness of the Theban 'Frieze of Ladies' to Cretan and, perhaps, specially Knossian models.

[2] A. D. Keramopoullos, Ἀρχ. Δελτ., iii (1917), p. 196, Fig. 140.

[3] R. C. Bosanquet, *B. S. A.*, xxiv (1904), p. 322 seqq., and Pl. XIII.

and the small bowl, illustrated above,[1] from a tomb at Sakkara of Thothmes III's time.

Parallel from Mycenae.

There exists an interesting painted stucco fragment from the area of the Megaron at Mycenae (Fig. 484),[2] showing the arm and part of the neck and body of a youthful male figure which, from the manner in which the body is thrown back, also probably belonged to the processional and offertory class. The fruit or flower-bud held in his hand supplies a parallel to the Theban votary with the lilies and the bracelet, curved to follow the outline of the knuckle,[3] is of the same form as the anklets already described. This figure, with its yellow outline, is of an unique character, but it attests the existence on the walls of the Mycenae Palace of processional figures very much in the style of the Cup-bearer at an epoch not long posterior to it.

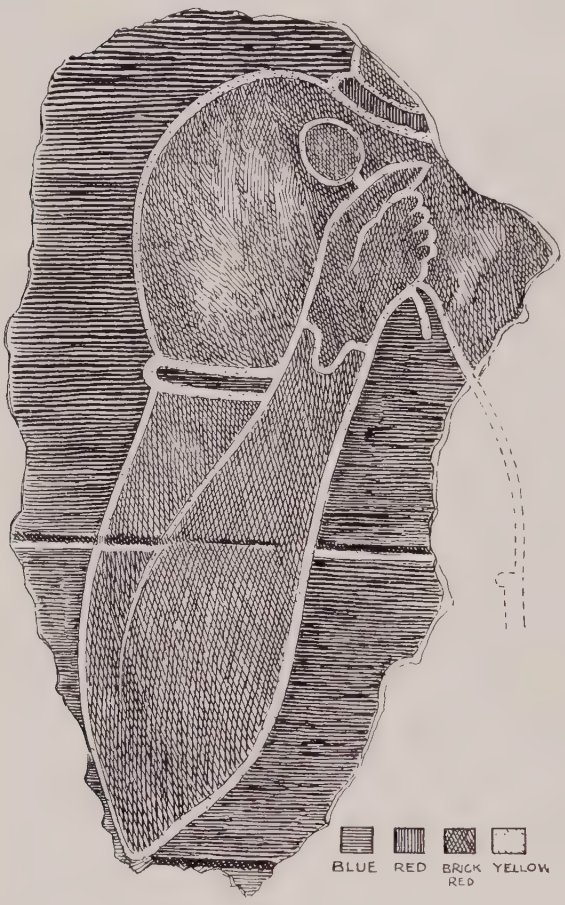


Fig. 484. Painted Stucco Fragment of Processional Youth holding Fruit or Bud (Bukarest Museum).

Unfortunately, this painted stucco fragment from Mycenae gives us no clue as to the style of loin-clothing worn by the figure. It is clear, however, from the scores of existing representations of Late Minoan male figures that in Crete, and to a great extent also on the Mainland side, the older manner of girding the loins was still continuously in use, the fuller raiment that seems to have been usual for Palace and ceremonial costume in the age to which the 'Proces-

[1] P. 498, Fig. 304, *g*.

[2] Now in Bukarest Museum.

[3] Compare the actual outline of knuckle rendered in a similar manner by a black line on a fragment of a full-sized female figure from the Early Palace at Tiryns (G. Rodenwaldt, *Tiryns*, ii, p. 87, Fig. 37). The lady is wearing a beaded bracelet.

sion Fresco' belongs having been confined even at that date to a limited official circle.

That at a time contemporary with the execution of the 'Procession Fresco' itself, the older form of loin-clothing was still depicted on the Palace walls at Knossos, is evidenced by two interesting painted stucco fragments, here for the first time illustrated (Fig. 485). These were found close together in a heap of debris a little South of the Section of the Corridor, containing the remains of the 'Procession Fresco'. As restored in Fig. 485, we see here the head of one life-sized figure of a youth close behind the thigh of another man, who stands on an elevation about 40 cm. (16 in.) higher, and is wearing a loin-cloth of the narrower kind, as richly embroidered as its space allows. The other piece presenting black foliate coils on a blue ground, probably representing silver, may well form part of the curved plate of the metal belt. The profile of the face shows a somewhat blunter nose than the Cup-bearer, but the rather full lips bear a close resemblance. It is certainly a contemporary work, and the probability is that it belonged to some adjacent space, though the abrupt difference in level of the two figures—exceeding that of a single step—is difficult to account for. Perhaps we have here a fragment of a large scene depicting a crowd of men.

Painted stucco fragments from South of 'Corridor of Procession'.

Fig. 485. Proposed Restoration of Painted Stucco Fragments found South of 'Corridor of Procession'.

In the bull-ring, as we shall see, female as well as male acrobats were girt with the loin-clothing of narrower kind.

Relief on Knossian 'rhyton'.

A further example of this form of attire applied to processional figures is seen in the fragment of a steatite 'rhyton' from the Southern border of the Palace shown in Fig. 486,[1] belonging to the transitional M. M. III*b*–L. M. I *a* style. There here appear two men, clearly part of a larger train, girt in the older fashion, proceeding beneath what seems to be a hill sanctuary, and holding out offertory bowls, possibly with both hands. Their bodies are well thrown back as if to supply a counterpoise to the supporting action of the hands.

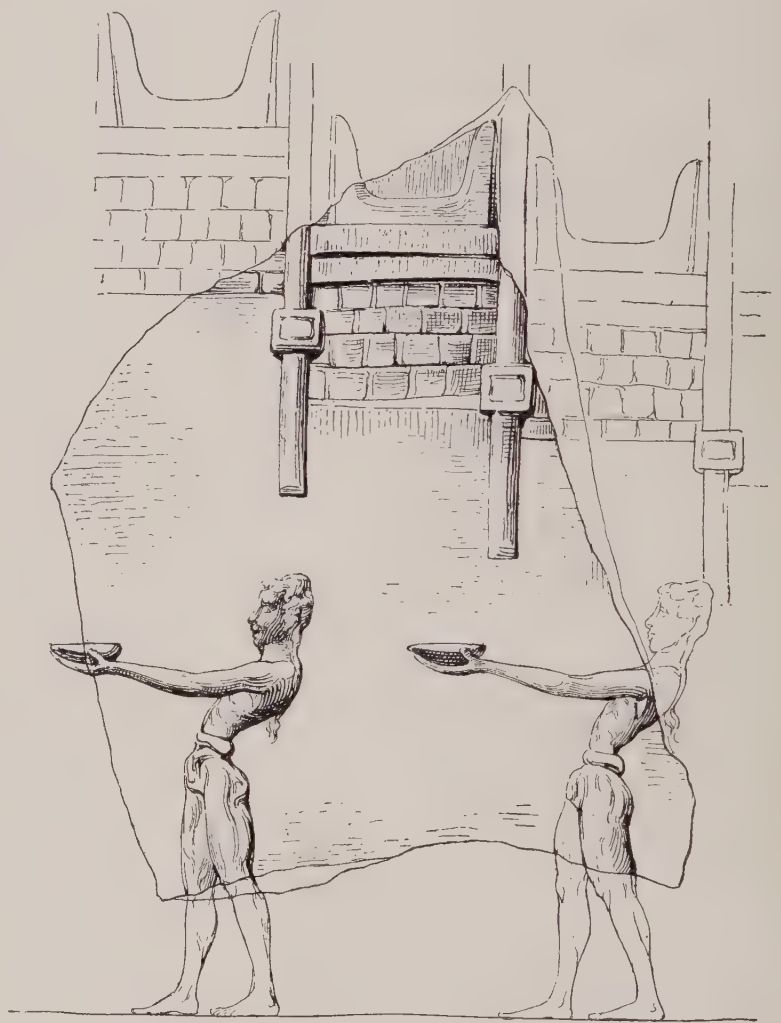


Fig. 486. Relief of Offertory Figures and Sanctuary Wall, on Fragment of Steatite 'Rhyton', Knossos.

The construction here seen, with its wooden posts of the kind that recurs in the Grand Stands of the Miniature Frescoes[2] and elsewhere,[3] has considerable interest. The 'sacral horns' between the posts, set above the

[1] See A. E., *Report, Knossos*, 1903, pp. 129, 130, and Fig. 85.

[2] See Vol. iii.

[3] See *P. of M.*, i, p. 688 seqq. and Figs. 507–9 and 511.

coping stones of the isodomic walled intervals, attest the sanctuary character of the building.[1]

That small friezes presenting reliefs of processional figures with offerings similarly attired had already existed at Knossos in the last Middle M. M. III terra-cotta

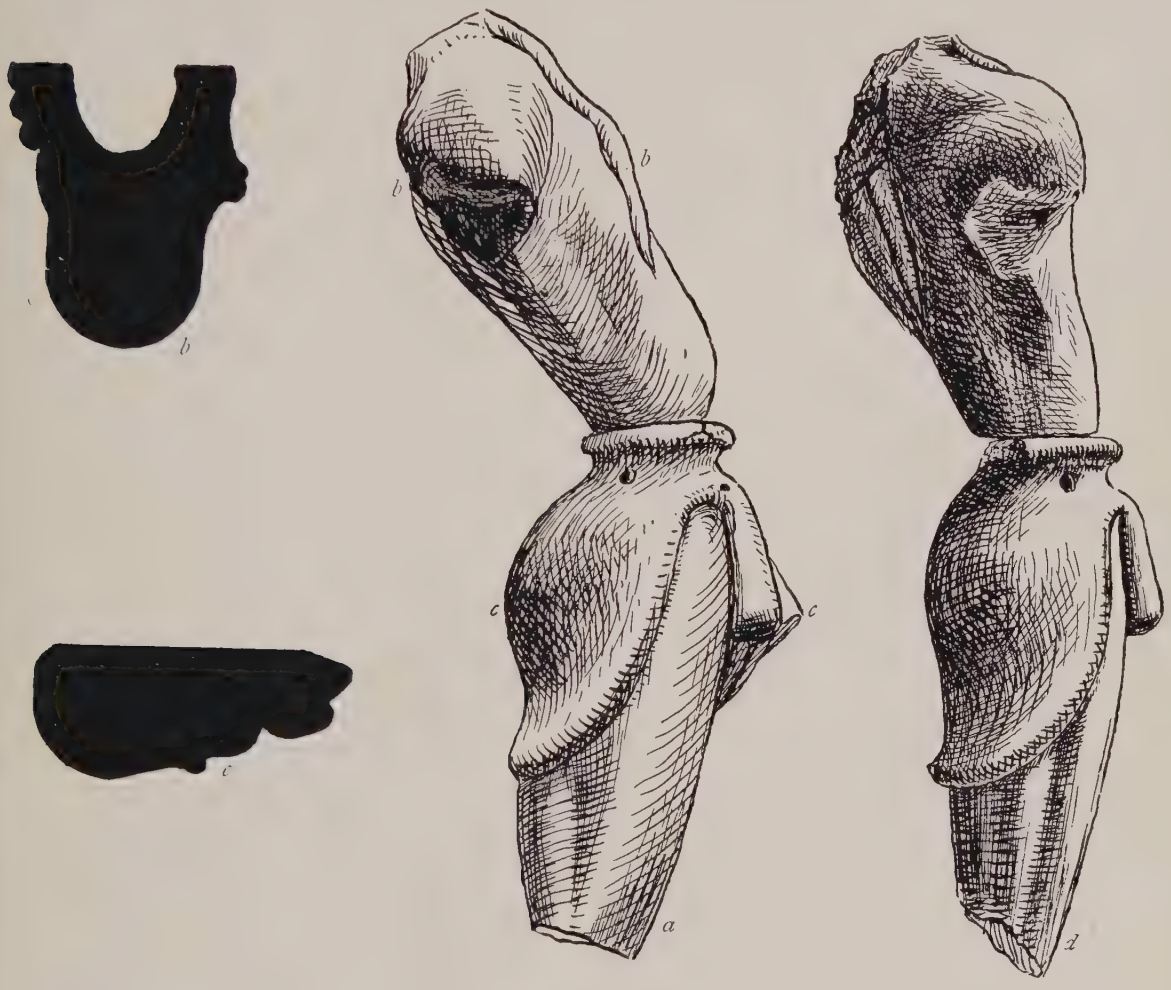


Fig. 487. Terra-cotta Relief from 'House of the Sacrificed Oxen': M.M. III *b*, with Sections *b–b* and *c–c*.

Minoan Period may be inferred from a fine terra-cotta relief found in a M. M. III *b* stratum of the 'House of the Sacrificed Oxen',[2] and here illustrated. This relief, displaying the greater part of a sinewy male figure with the left leg thrown forward in the act of advancing (see Fig. 487, *a*), was relief from 'H. of Sacrificed Oxen'.

[1] A similar structure showing the horns within the openings and apparently stepping up may be made out on a fragment belonging to the 'Besieged City' on the silver 'rhyton' from Mycenae.

[2] See above, pp. 310, 311.

designed for affixing to a flat surface, a small hole being visible just below the belt, so that it could be secured in position by means of a pin. The abdomen was hollowed out as shown by the section (Fig. 487, *b–b*) going through the shoulder. The section, Fig. 487, *c–c*, cuts through the buttock and thigh. It is here drawn both in full side view (*a*), and slightly behind the back (*d*), on which appears the ends of long falling locks, while another descends over the right breast. The whole pose, with the upper part of the body thrown back, recalls that of the processional youths of the Fresco, and points to the arms having supported some heavy object. The figure, which is certainly one of a series, must have stood about 29 centimetres (11½ inches) high. Some traces of a plaster wash were found on the terra-cotta surface, and this in its original state was doubtless brightly coloured.

Fig. 488. Archer, probably Young God, on Seal-impression: from 'Temple Repositories', M. M. III *b*.

Early use of 'kilt' at Knossos.

The existing remains of the 'Procession Fresco' favour the view that at the time when it was executed—*ex hypothesi* in the last decades of the sixteenth century B. C.—the 'kilt', covering the whole of the body from the belt nearly down to the knee, was the usual Palace attire, and we may already see a reflection of this in the garb of the young Minoan shown in the relatively early tomb of Puemra (Fig. 472, above).[1] That it was not itself a novelty in Crete is shown by a seal-impression representing an archer—probably a young God and accompanied by a lion—from the Temple Repositories here enlarged (Fig. 488),[2] though in that case the end of the skirt was double. Something resembling it, indeed, is already seen in the engraved dagger-blade from Psychro, attributed to M. M. II.[3] A still nearer parallel, moreover, occurs on a plaque of the 'Town Mosaic'[4]—apparently not much later in date—representing a figure of an archer, and perhaps already pointing to a kind of uniform. We may, however, reasonably regard it as to a certain extent due to the influence of foreign fashions, both on the Asiatic side and in

[1] P. 739, Fig. 472.
[2] See *P. of M.*, i, p. 680, Fig. 500, *f*.
[3] *Ibid.*, i, p. 718, Fig. 541, *a*.
[4] *Ibid.*, i, p. 309, Fig. 228, *p*.

Egypt, where the extent to which the body was exposed, even in the latest prehistoric period,[1] had been sensibly reduced in dynastic days. The flounced kilt of the archer in Fig. 488, who holds a bow of the Asiatic, horned type, may itself, like the flounced skirts of the latter-day Minoan women,[2] be due to Oriental influences, but the sash of netted beadwork in front of some of the figures of the 'Procession Fresco' suggests an analogy with the double uraeus pendant worn by Egyptian kings.

Ceremonial garb and official uniform.

The introduction of this costume may, as in the case of the gaberdines worn by the offertory figures on the Hagia Triada sarcophagus, and Nos. 1–6 of the 'Procession Fresco', have also been due to religious influences, and, indeed, a variety of the kilt seen on another Repository sealing[3] is worn by a warrior or male divinity of somewhat Hittite aspect. For ceremonial display this broad form of loin-cloth was much better fitted than the scantier type, owing to the larger field that it offered for embroidered decoration. As worn by the Minoan envoys and by the processional figures of the Fresco we may certainly regard it as a kind of Court dress at this period, while in the remarkable fragments of wall-painting, described below as the 'Captain of the Blacks', we see it adopted as the uniform of Soudanese mercenaries, who may have formed part of the Palace Guard.

'The Captain of the Blacks.'

Painted stucco fragments with 'Captain of the Blacks'.

The discovery of these fragments was made in the area of the 'House of the Frescoes', but at a somewhat higher level than the fresco stack,[4] near the border of the Roman oven there brought to light. The two pieces found, which are shown, slightly completed, in the Coloured Plate XIII, differ in character from any that occurred in the large deposit and, from their position, seem to have belonged to a somewhat later date. They represent two sections of a painted band, the background of which, like that of the processional frieze from the Kadmeion, changes its hue vertically, in this case from white to blue.

On the larger piece, a Minoan Captain is seen leading the first of a negro troop at a run. He wears a black goat's-skin cap with the horns attached, and, below his belt, a short yellow tunic with a border striped black and white and coming to a point in front, so that the loin-clothing greatly resembles that of the Cup-bearer and other processional figures that decorated the entrance system of the Palace. A necklace and bracelet, probably of silver, and gleaming white against the ruddy skin colour, adorn his neck and wrist, and he is armed with two spears. The fragment preserved of the negro who immediately follows him shows that he wore a similar uniform, the tunic

[1] See Suppl. Pl. XII.

[2] See *P. of M.*, i, p. 197, and Fig. 145.

[3] *Op. cit.*, p. 680, Fig. 500, *e*.

[4] See above, p. 444 seqq.

in this case having a blue ground with a border striped yellow and black. That the black troops were provided with the same head-gear appears from the fragment with the white ground, though only one spear is visible in this case.[1]

Employment of negro auxiliaries symptom of African connexions.

The employment of negro auxiliaries by Minoan commanders, thus authenticated, is itself an historical fact of the greatest significance. Of close relations with black men we have already had evidence in the remains of negroid figures, some in suppliant guise, found with the Town Mosaic (Fig. 489).[2] The early intercourse between Crete and the lands beyond the Libyan Sea had brought the Islanders primarily into connexion with an ethnic stock of more or less kindred Mediterranean type, akin to the modern Berber, but it must never be left out of account that the caravan-routes leading from the African interior to the coast opposite Crete are many of them of immemorial antiquity.[3] The routes from Tunisia to the Niger are marked by a series of Neolithic settlements, and it is probable that those within nearer access to Crete, such as that from Tripoli to Lake Chad, and also to the Niger, or those from Benghazi to the Western Soudan and Darfur, were of equally ancient date. We may well believe, indeed, that it was by these routes, at least as much as through the Nile Valley, that such exotic products as ivory, ostrich eggs, gold dust, and some, perhaps, of the long-tailed Soudan monkeys reached the Southern havens of Crete. If, as there is so much evidence to show, about the date of Menes' Conquest of the Delta there had been an immigration of dispossessed Libyan elements into the Messarà region, it is not unreasonable to suppose that, in the great days of Minoan civilization, settlements from the Cretan side preceded those of the Greeks in Cyrenaica and the neighbouring coast-lands.

Were Black regiments on the mainland side?

The actual enlistment of black troops may be regarded as a symptom of conquest and colonial expansion on the African side, and their employment on European soil is closely paralleled by the part played by 'Turcos' and Senegalese troops in more recent warfare. At Knossos, as suggested above, these black mercenaries may well have served as Palace Guards.

In the use of such auxiliaries, the Minoan lords were but availing themselves of a resource of empire already not unknown to the Pharaohs. An illustration of this is supplied by the wooden model of a troop of black soldiers—in this case Nubian mercenaries—from an Eleventh or Twelfth

[1] It is possible, however, that there was a second spear immediately beyond the break.

[2] Reproduced from *P. of M.*, i, pp. 308–12, and Figs. 228, 230. They show the swarthy skin colour, prognathism, abdominal prominence, and steatopygous rump. For negroid influences on pre-dynastic Egypt, see above, pp. 45, 46, and Fig. 21, *a*.

[3] See Sketch-Map of the East Mediterranean Basin, *P. of M.*, i, facing p. 1.

'THE CAPTAIN OF THE BLACKS'

Facing p. 756

Dynasty Tomb at Siût.[1] These are placed side by side with Egyptians, and, like them, are uniformed in Egyptian kilts and each equipped with a single spear.

The Minoan imitation of this Egyptian practice, illustrated by the fresco before us, derives a special significance from the epoch to which it belongs. For this was the age of the great expansion overseas, and of comprehensive schemes that must have strained to the uttermost the man power that the Island itself could muster. In view of this evidence, it seems quite possible that the Minoan commanders made use of black regiments for their final conquest of a large part of the Peloponnese and Mainland Greece.

Jerusalem under Amenhotep III had an unpleasant experience of turbulent behaviour at the hands of a negro garrison. The Soudanese—Kaši (or Kushites)[2]—here stationed, seized horses and went off, after nearly murdering Pharaoh's officer in his own house.[3] This, however, was only a symptom of the general anarchy prevailing on that side. There is no reason to suppose that negro mercenaries drilled by Minoan officers, like the troop before us, were otherwise than well disciplined.[4]

[1] In the Cairo Museum (Maspero, *Guide*, 1910, p. 494). Their hair and features are clearly Hamitic, though the black skin argues an infusion of negro blood. A similar black guard, armed with a bow, is seen on a model boat from Tomb 186, Beni Hasan, in the Ashmolean Museum. Dr. H. Junker has shown that pure negro types were rare, even in Nubia, to a comparative late date (*The first appearance of the Negroes in history*, *Journ. of Egypt. Arch.*, vii, 1921, transl. B. Gunn). In Egypt they only become frequent from Thothmes III's time—*c.* 1500 B.C. Assuming that the fresco represents the imitation of an Egyptian practice this would fit in with a L.M. I*b* or L.M. II date.

[2] Dr. H. R. Hall notes in his *History of the Near East*, p. 348, that the Kaši who committed this outrage were Kushites, not Nubian Kossaeans or Kassites.

[3] Amarna letter, Knudtzon 287.

[4] It may be recalled that even the swarthy Egyptian troops—consisting of largely negroized Arabs—under Ibrahim Pasha, who in the interest of the Turks methodically devastated the Morea in later times, were not deficient in discipline.

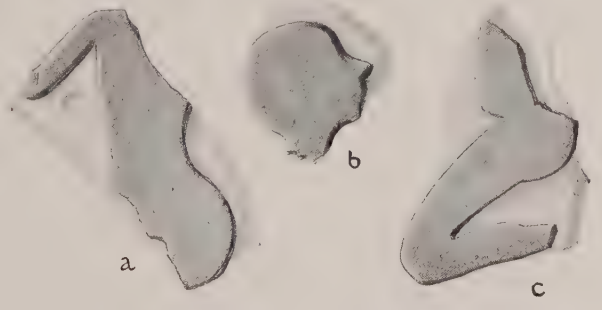


FIG. 489. FRAGMENTS OF FAÏENCE PLAQUES WITH NEGROID CHARACTERISTICS. OTHER FRAGMENTS SHOW HANDS STRETCHED OUT IN SUPPLIANT GUISE. ($\frac{2}{1}$)

§ 64. Ceremonial South-North Corridor: I. Deposit of Seal-impressions—'Young Minotaur' and Counterfeit Matrix: The 'Palanquin Fresco'.

Eastward continuation of 'Corridor of Procession'; Junction with entrance passage from South; The later cross-road from bridge-head to South Porch; Earlier entrance system from South Porch; South-North Corridor approached by Staircase; Ceremonial character of Corridor; Served natural pilgrim route from Juktas shrine; Marked by series of religious remains; Deposit of seal-impressions—'The Young Minotaur'—influenced by adorant Cynocephalus type; Collared hounds—Dogs as guardians of Goddess; Swallow, on string; Clay matrix from official signet; Mystic goblet presented to Goddess seated on pillar shrine; Replica of signet-type from Zakro; Conical 'rhytons' used as goblets; The 'Palanquin Fresco'—sacerdotal figures; Parts of palanquin; Restored group; Special significance of discovery on ceremonial approach.

Eastward continuation of 'Corridor of Procession'.

There is clear evidence that the Corridor to which the processional figures described above belonged, continued in a straight course beyond the point where it had given access to the similarly decorated Propylaeum hall. Above the floors of the basement areas that define the further course East of this stately entrance passage, there were, in fact, found sunken fragments of the green schist slabs belonging to its lateral lines of pavement. About 4 metres before reaching the landing of a staircase, to be described below, leading up from the South Porch, a gypsum block in the North wall of the Corridor was ledged below, in order, as already noted,[1] to support the edge of its pavement. The indication of the level on which the pavement rested—3·25 metres above the floor of the Southern terrace—was found to correspond to a centimetre with that of the entrance section of the Corridor and of the West Porch, supplying thus a signal illustration of the accuracy with which the Minoan builders had here executed their work.

Junction with entrance passage from South Porch.

At the staircase landing above referred to, the history of this avenue of approach from the West Court merges with that of another line leading up from the South Porch.

[1] See above, p. 685.

From the comparatively small dimensions of the South Porch (see Plan, Fig. 490, A), it may be inferred that at no time in the Palace history had it played a leading role. This conclusion is, indeed, explained by the discovery that the main communication between the Great South Road and the Palace had been effected through the Stepped Portico above described,[1] by means of which travellers approaching from that side had been able to make their way under cover to what had evidently been an important entrance at the South-West Angle of the Palace. From the old South-West Porch a direct line of approach to the Central Court had formerly run along the West Section of the South Corridor to a point—in connexion also with the South Porch—where a gap between the blocks of ashlar masonry points to the existence of an original ramp, running up due North to the Court (see Diagrammatic Plan, *P. of M.*, i, Fig. 152, opp. p. 203).

Later cross-road from bridge-head to S. Porch.

After the great Earthquake, when the Western Section of the South Corridor was definitely abandoned, and the Stepped Portico from the bridge-head lay in ruins, conditions radically changed. To a certain extent, no doubt, the West Porch and adjoining entrance Corridor in their restored shape[2] may have taken over the line of communication with the Great South Road. But the Southern entrance itself in its later shape not only continued its functions, but seems to have added to them by means of a cross-line of communication with the bridge-head. The entrance to the Porch was on its Western side, and here the causeway by which it had been originally approached, which could not have been of any great dimensions, was found to have been superseded, at a higher level, by a paved way of massive 'kalderim' construction. This, where best preserved, was about four metres broad, and pointed almost due West. As, however, the contemporary South House would have blocked its further course in that direction, it follows that it must have reached the bridge-head to the South-West by a somewhat zigzagging course down the incline. Its pavement was compacted of re-used base-slabs, taken no doubt from the ruins of the original South front of the Palace, and their clay setting was laid above debris due to the effects of the great earthquake shock. Underneath this artificial clay layer were found, in fact, remains of vessels such as 'Medallion' *pithoi* and jars of types similar to those of the Temple Repositories, together with cups of the same epoch, and quantities of fragmentary

[1] See above, § 38.

[2] The ruined Western Section of the South Corridor must now have been shut off from the new entrance passage from the South Porch by a cross-wall, probably a prolongation of the Western wall of the Porch. This, however, had disappeared.

sherds.[1] We had here, indeed, the typical 'pre-seismic' remains of M. M. III *b*.

Earlier entrance system from S. Porch.

The open, winding gangway that turned to the right immediately on entering the South Porch and formed an Eastward continuation of the old South Corridor apparently remained in use, turning up North near the South-East Palace Angle, and thus supplying an ascending roadway for traffic to the Central Court on that side.

'South-North Corridor' approached by staircase.

But the gradually ascending passage which in the earlier Palace stages seems to have run straight up from the South Porch had now ceased to exist, its former course being blocked by a series of basement spaces. The place of this earlier ramp or step-way was now taken by a passage on a higher level, approached by a staircase, of which there are evident traces a little within the Southern Entrance on its left side (see Plan, Fig. 490, A, B).

At this point there has been preserved a rectangular structure which, though exceptionally elongated, answers to the usual staircase plan, with a central dividing block of masonry.[2] This staircase, however, had actually only a single flight, which reached a landing that opened on what, as we have seen, had been the continuation East of the 'Corridor of the Procession' (see Plan, Fig. 490).

The breadth of the staircase, 2·60 metres, answered to that of the Corridor above, and its length—7·50 metres[3]—allows for twenty steps of normal height and tread.[4]

The upper Corridor, to which access was thus given from the Southern entrance, answered to a prolongation East of the 'Corridor of the Procession' at the same level. At the point where this combined gangway turned North towards the Central Court, we may infer that there was a window overlooking the roof of the South Porch (see Plan, Fig. 490, B). As shown by the ledged side-block referred to above, the level at which the Corridor reached its turning North was 88 centimetres below the pavement of the

[1] One interesting result of the analysis of these, already noticed, was to demonstrate that certain late offshoots of the 'tortoise-shell ripple' hitherto supposed to have been characteristic of the earliest phase of L. M. I were already in existence before the end of M. M. III.

[2] At the time of Reoccupation, when the stairs themselves had ceased to be used, a spur of walling of rubble construction was built up against the South flank of the staircase wall. The two-roomed area thus formed was used as a dwelling place for later squatters, and several L. M. III *b* vessels were found on the floor-levels.

[3] Assuming that the depth of the landing equalled the width of the stairs.

[4] The height here reckoned, 16 centimetres, represents a good average, and 39 cm. for the tread is also a normal measurement for the Palace stairs.

S.W. corner of the Central Court. This would have necessitated five steps[1] in its terminal course in that direction, such as are indicated in the Plan.

Ceremonial character of South-North Corridor.

There is every reason for concluding that this 'South-North Corridor', which gave direct passage to the Central Court on its Southern side, was used in a special way for pageants and religious processions. In one direction it formed the prolongation of the State entrance passage from the West Porch, presenting in its Southern, and doubtless also throughout its Eastern, course the stately processional themes described above. While, moreover, the ordinary traffic from the South Porch seems to have wound its way to the Court past the South-East Palace Angle and the upper borders of the 'Domestic Quarter', the staircase immediately within it may well have served as a more select means of access.

Natural pilgrim route from Juktas shrine.

It is to be remembered that the Southern Entrance, with its cross-road to the bridge-head below, apart from the connexion thus established with the Great South Road, opened on the natural route that pilgrim throngs or solemn processions would have taken—following doubtless a more direct hill-path in preference to the main high road—to the sanctuary of the Goddess on the heights of Juktas.[2] It is reasonable to suppose that her central shrine, overlooking the Court, where the Minoan Rhea appears on seal-impressions as the lion-guarded Goddess of the Peak, had a direct relation to the Sacred Mountain of Knossos, and it was by this central avenue of approach on the South side of the Court that votaries would naturally pass.

Marked by series of religious remains.

That this 'South-North Corridor', representing the junction of the two passages leading from the Western and the Southern entrance, fulfilled a specially ceremonial and religious function may be inferred from a whole series of remains with which it was associated. There is reason, indeed, as will be shown below, for believing that its whole course may have exhibited in an even more splendid form the processional scheme of decoration illustrated by the entrance Corridor from the West. An interesting element of actual continuity was at the same time preserved in its flooring. From the remains of slabs of blue-green slate found throughout its length beneath the original level of the pavement we may infer that it had consisted, as in the Western section of the Corridor of the Procession, of two border strips of this material, faced in the same way with red stucco on either side of a central band of gypsum slabbing.

The course of this Northern section of the Corridor is defined, moreover, by parallel lines of lower walling which show that it had the same width as

[1] The 6th step on the Plan is the stylobate of the Court.

[2] *P. of M.*, i, § 6.

the Western section, and it will be seen from the Plans, Fig. 490, A, B, that it passed over or in immediate relation to a succession of small basement spaces, the contents of which clearly reflect the ceremonial character of the Corridor itself.

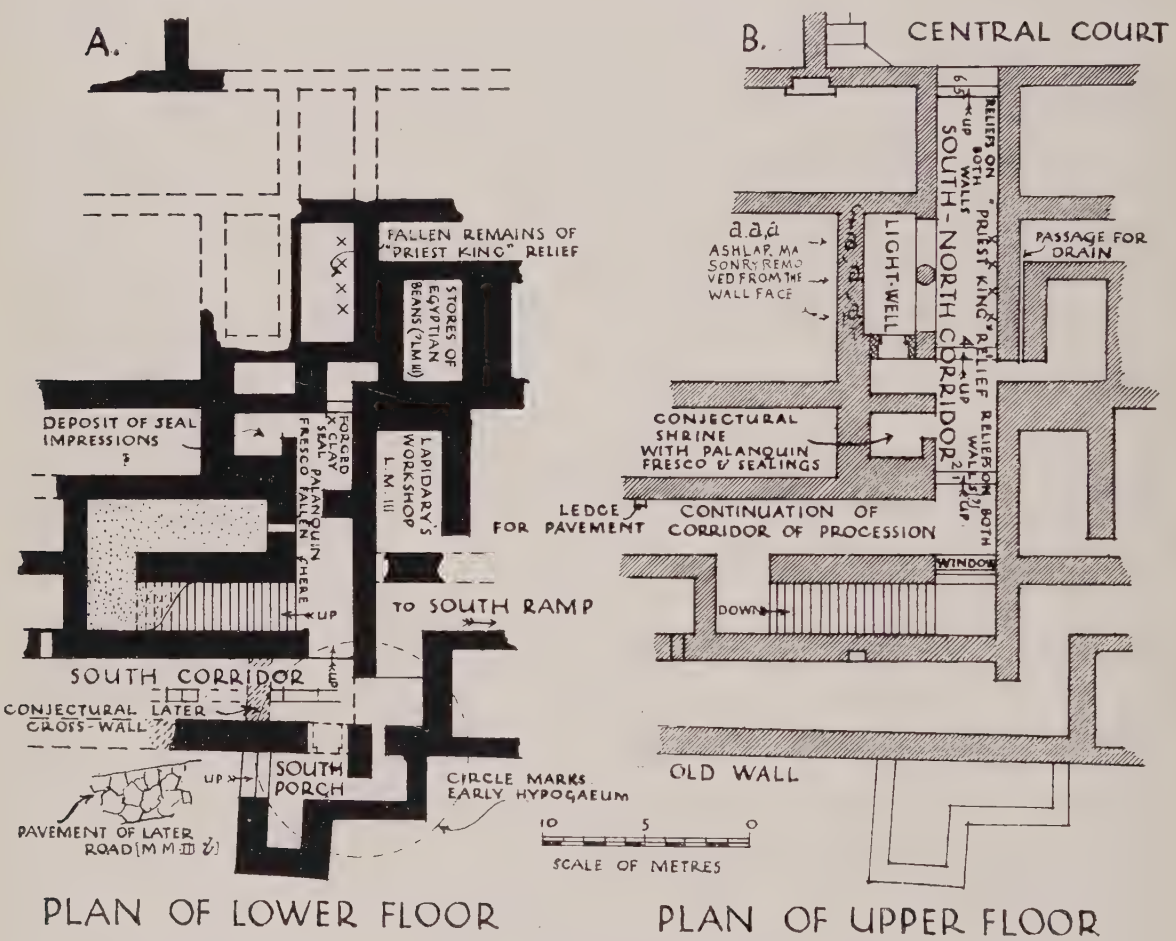


FIG. 490. A, B, PLANS SHOWING APPROACH FROM SOUTH PORCH AND 'SOUTH-NORTH CORRIDOR'.

Deposit of Seal-impressions; the 'Young Minotaur'.

Deposit of seal-impressions.

It is clear that the passage-way had lateral communications with several small chambers of a ritual destination. The basement space answering to the first of these, immediately to the left of the Entrance lobby (see Plan, Fig. 490, A), was found to contain a considerable deposit of clay seal-impressions, nearly all more or less broken, some of them of great religious interest, derived from a room above which seems to have formed part of a small sanctuary.

Amongst these, two specimens are of an enigmatic type of which a revised delineation is given in Fig. 491.[1] It presents what might be described as a 'young Minotaur', seated on a kind of camp-stool such as is in other cases associated both with votaries and with the Minoan Goddess herself. He has human legs and a girdle round the waist, but his fore-feet and head—as usual in the Minoan type—are bovine, though in this case there is no trace of horns. Immediately in front of him is some kind of tree, and at his feet is visible the front part of a couchant ram. Behind, appears the upper part of a human figure, clad in what may be described as a sleeved cuirass, bending towards the monster, and pointing downwards at the ram's head—much as we see in pictorial versions of the scene where the Angel points out to Abraham the substituted ram.[2]

The 'Young Minotaur'.

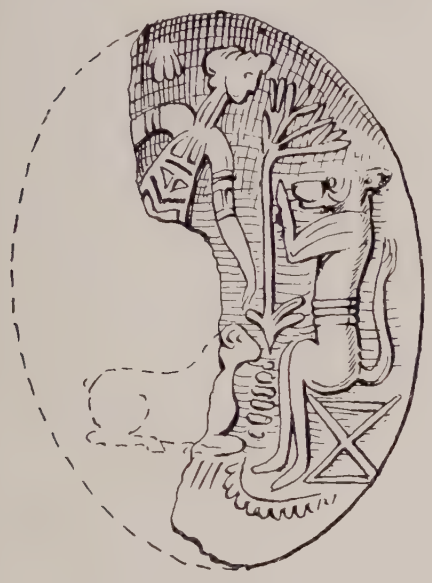


FIG. 491. 'THE YOUNG MINOTAUR' ON CLAY SEAL-IMPRESSION.

Little can be said about this enigmatic design except that in the attitude of the seated monster with his fore-legs raised in the act of adoration we may venture to trace the influence of Egyptian figures of the Cynocephalus ape, the companion of the lunar god Thoth, as represented worshipping the rising sun. There is clear evidence that the dog-faced ape of the Soudan, who was credited by the Egyptians with wisdom beyond that of mankind, had been early impressed into the service of Minoan religious imagery. Pairs of such in their characteristic adorant pose already appear on ivory seals of E. M. I and E. M. II date.[3] A seal-impression from Zakro[4] and another from Hagia Triada,[5] here shown for comparison, Fig. 492, *a*, *b*, belonging to the transitional M. M. III–L. M. I *a* epoch, undoubtedly exhibit versions of this Egyptian type. The engraved besil of a

Influence of Adorant Cynocephalus.

[1] From a drawing executed under my superintendence by Mr. Piet de Jong in 1922. (For the original reproduction A. E., *Knossos, Report*, 1901, p. 18, Fig. 7, *a*, *B. S. A.*, vii.)

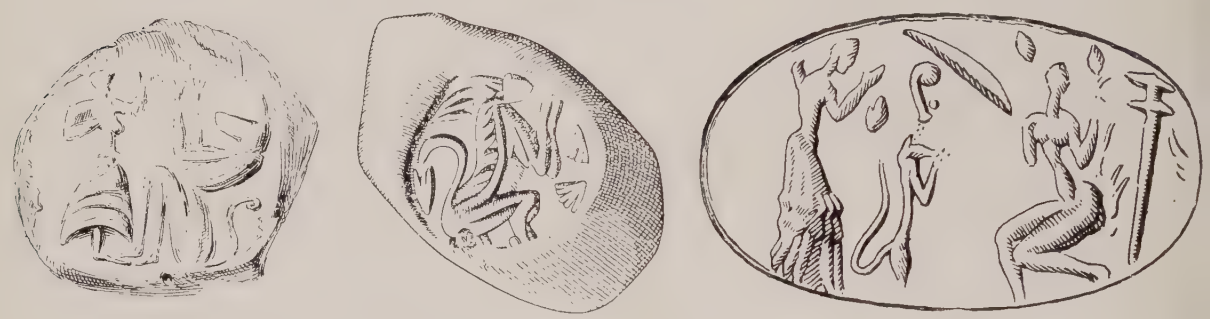
[2] Genesis xxii. 13.

[3] See *P. of M.*, i, p. 83, Fig. 51, and note.

[4] D. G. Hogarth, *Zakro Sealings* (*J. H. S.*, xxii, 1902), p. 78, Fig. 4, who observes: 'Certainly the monster is nearly related to the adoring dog-apes of Egypt.'

[5] F. Halbherr, *Mon. Ant.*, xiii (1903), p. 39, Fig. 32, who notes the comparisons with the seal-impressions from H. Triada and Zakro.

gold signet-ring from the Phaestos Cemetery, Fig. 492, *c*,[1] carries the scene a step farther. Here a female votary with raised hands is seen beside the Cynocephalus, and the adoration of both is directed to a seated figure of the Minoan Goddess behind whom rises a column indicative of her pillar-shrine. We may in this case detect a further allusion to this chapter of Egyptian beliefs concerning the Cynocephalus ape in the plume-like object seen in the field above him. This is the ostrich-feather of Maat, the Goddess of Truth



a *b* *c*

Fig. 492. Minoan Seal-types showing Adorant Cynocephalus: *a*, Clay Impression, Zakro; *b*, Clay Impression, Hagia Triada; *c*, Gold Signet-ring, Phaestos.

and Justice, the weighing of which against the heart of the deceased it was the special function of the Cynocephalus to observe.

Three fragmentary seal-impressions showed the Minoan Goddess with a male adorant, and there also occurred an example of an interesting subject already referred to in connexion with the bronze 'hydria' from Cyprus[2] and more fully illustrated in a later Section—a Minoan Genius, derived from the Egyptian Hippopotamus Goddess, holding an ewer.

Collared Hounds.

Numerous impressions, some of them very well preserved, presented as their sole type a large hound—a bitch—with her head turned back and a collar round her neck, executed in the finest transitional M. M. III–L. M. I *a* style (Fig. 493). It is noteworthy that other impressions from the same seal occurred in the neighbourhood of the Central Shrine in the West Quarter of the Palace. On a seal-stone of the earlier phase of the Late Minoan Age a huge collared dog appears, led by a male attendant (Fig. 494).[3]

[1] L. Savignoni, *Mon. Ant.*, xiv (1904), p. 578, Fig. 51.

[2] See above, pp. 652, 653, and Fig. 417.

[3] *Tomb of the Double Axes, &c.* (*Archaeologia*, lxv, 1914), p. 10, and Fig. 15; on a green jasper lentoid from E. Crete. The chalcedony intaglio, from the built tomb (No. 1) at Isopata (*loc. cit.*, pp. 9, 10, Fig. 14), perhaps represents a lion rather than a mastiff.

On an impression of a seal of exceptionally fine style from the Treasury Deposit of the Domestic Quarter, partly restored in Fig. 495, we have a distinct indication of the sacral character of the animals. In this case the male custodian stands between two seated hounds with a short rope crossing the neck of each, in the same heraldic position in which the Goddess herself—in other cases her male satellite—is seen between her guardian lions. It seems probable that we have here a representation of the young God.

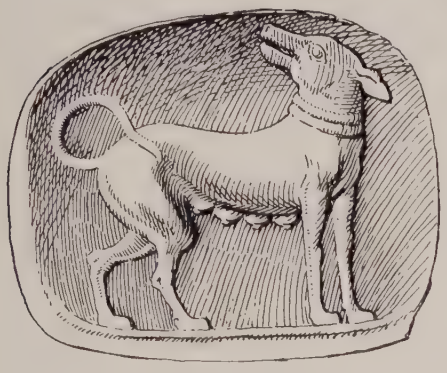


Fig. 493. Clay Impression showing Collared Bitch.

Hounds as guardians of goddess.

It is interesting to recall that both Minos and the Cretan Mother Goddess, under the name of Europa, are associated with a legendary hound.[1] So, too, when Apollonios of Tyana, according to his hagiographer, made his arduous pilgrimage, up the Western promontory on which it lay, to the temple of Diktynna—an indigenous name for the Minoan Goddess in her quality of

Fig. 494. Large Collared Dog led by Man. Green Jasper Lentoid, East Crete.

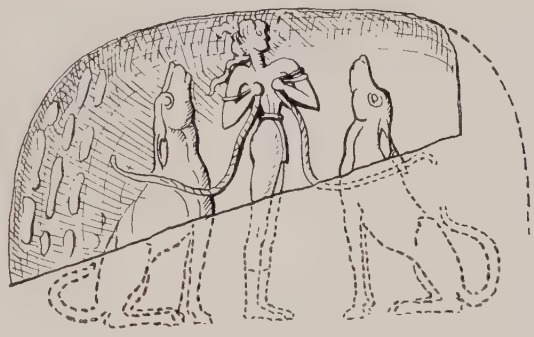


Fig. 495. Seal-impression, partly restored, showing Youth (perhaps Young Male Divinity) holding Two Cords which cross the Necks of Two Seated Mastiffs.

of huntress—he found it guarded with great dogs, which the Cretans boasted to be as strong as bears.[2] We may recall the sacred dogs in the service of the nearly related divinity of Eryx[3] and those 'exceeding the

[1] Λαῖλαψ = Hurricane.

[2] Philostratus, *De Vita Apollonii*, lib. viii.

[3] The Elymian Goddess is regularly associated with a hound on coins of Eryx, Motya, and Segesta.

Molossian hounds in size and beauty', that watched around the shrine of the Sikel God, Hadranus, and executed his behests.[1]

To these examples may be added a more uncertain representation engraved on a chalcedony bead-seal found in Tomb I of the Isopata Cemetery (Fig. 496).[2] In this case we have to deal with an animal of relatively colossal size wearing a bossed collar, attended by two male figures. Its head might rather be taken for that of a lion, but its tail is certainly a dog's.

Fig. 496. Collared Mastiff with Two Attendants on Bead-seal, Isopata. ($\frac{3}{1}$)

Other types from the above deposit referring to bull-grappling scenes also probably stand in a sacral relation.

Swallow on string.

One, unfortunately somewhat distorted, impression presents a remarkable design (Fig. 497). A female figure—perhaps of a religious character—in a flowery field is here seen with a swallow on the end of a line—perhaps a string to which it is attached—apparently luring another. Conventional flowers are seen in the field and rock-work below. The attention that Minoan householders paid to these birds has been already illustrated by the remains of the clay 'nesting-bottles' found in the 'House of the Sacrificed Oxen'. The swallow early appears as an artistic motive, and on the contemporary wall-paintings of Phylakopi, executed, we may believe, by Minoan artists, is shown among the embroidered motives of a robe.[3]

Fig. 497. Female Figure and Two Swallows.

Other subjects represented in the hoard[4] may best be referred to a Section more specifically dealing with glyptic works. A few scattered specimens were found in two neighbouring basement spaces. Together with the fragments of sealings was

[1] *Aelian H. A.*, xi. 20.

[2] A. E., *Tomb of the Double Axes, &c.*, p. 9 (*Archaeologia*, vol. lxv), Fig. 14.

[3] *Excavations at Phylakopi in Melos*, p. 73, Fig. 61. A flying swallow also appears on a wall-painting from the same site (*op. cit.* p. 120, Fig. 92). Compare, too, p. 379, Fig. 211, *c*, above, from the 'South House'. A swallow appears on a three-sided bead-seal of M. M. III date. For the clay suspension pots, apparently made for swallows, see above, pp. 306, 307, and Fig. 177.

[4] Among these may be mentioned cattle pieces, scenes of the chase, a dog seizing an animal, water-birds, and papyrus-like sprays and fish. One curious specimen shows a man leaning over some kind of barrier, and looking at the head of what seems to be a magnificent galloping bull.

the bronze hinge of a small chest and clay nodules used in the preparation of the impressed sealings. The clay impressions had been attached, as in other similar cases, by threads or strings to documents in perishable materials or to the envelopes of packages.

Clay Matrix taken from Official Signet.

Clay matrix from signet.

The deposit of seal-impressions extended sporadically into the adjoining space East, and here, in the upper earth, were also found fragments of inscribed tablets of the Linear Class B. In this space, moreover, in the stratum underlying that containing the tablets, there came to light a clay matrix of great interest. Whether for legitimate facility in reproduction or with a view to the actual forgery of documents, it had been moulded on an impression of what seems to have been a gold signet-ring of a known religious class. Unlike the sealings used for documents and packages, the clay of this showed no axial perforation with remains of thread or string. It seems probable that the original signet from which this matrix was taken had belonged to some prominent Palace official. A series of the actual seal-impressions from the original were in fact found in the Lower East-West Corridor of the Domestic Quarter, and with the aid of these and the clay matrix it is possible to obtain a good idea of the design (Fig. 498).

Fig. 498. Signet-type found on Clay Matrix and Seal-impressions of Palace Deposits.

Mystic Goblet presented to Goddess seated on pillar shrine.

The Goddess, with her feet resting on a low platform, is seated upon the wing of a pillar shrine which, if completed, would seem to have closely resembled that repeated on the gold plates from the Third and Fifth Shaft Graves of Mycenae.[1] Here, too, we see a projection in the form of an altar with an incurved base and the sacral horns above. The Goddess, who wears the short skirts of the earliest phase of Late Minoan fashion, holds out her hands to receive a two-handled conical goblet from the hands of a female ministrant, similarly attired, who steps towards her. Immediately above the vessel is a ring of mystic significance, probably to be interpreted as the symbol of a celestial orb. Behind the first votary a second is seen turning away as if on some divine behest, and there is also visible in the extreme left

[1] Schuchhardt, *Schliemann's Excavations* (ed. Sellers), p. 199, Fig. 183.

of the field part of a smaller female figure, doubtless one of the pair of child attendants—the *Διάσκουραι* referred to above—who are often grouped with the Minoan Goddess. The rocks along the upper margin, like the rocky peak with its lion guardians, upon which the Goddess stands on a series of signet impressions from the Central Palace Shrine,[1] take us away from the Palace itself for the site of the Sanctuary represented. It seems, indeed, highly probable that in both cases we have to do with one and the same sanctuary of which the traces are still visible on the limestone ridge of Juktas.[2] This would have been the natural goal of periodical pilgrim deputations organized by the Priest-Kings of Knossos, and, as suggested above, the ceremonial processions connected with these would have in all probability passed along the Corridor with which we are at present concerned on their way to or from the Central Court.

FIG. 499. SEAL-IMPRESSION FROM ZAKRO SHOWING REPLICA OF DESIGN ON KNOSSOS SIGNET.

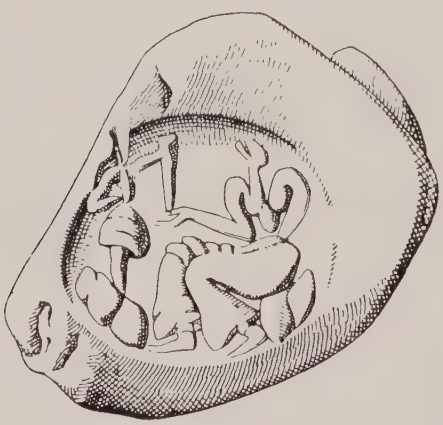


FIG. 500. SEAL-IMPRESSION FROM HAGIA TRIADA.

The scene itself is sacramental, and the signet from which the clay impressions were taken seems to have been in use for a considerable period of years, since several specimens were found associated with a hoard of tablets with inscriptions of the Linear Class B belonging to the closing epoch of the Palace.[3] The matrix, however, was found in the underlying deposit, which could not be later than L. M. I. As fixing the date of the signet, it is of great interest, moreover, to observe that a replica of this type occurs among the sealings

[1] See below, p. 809.

[2] *P. of M.*, i, p. 154 seqq.

[3] In a deposit fallen irregularly from above into the Lower E.-W. Corridor. Of the early L. M. I date of the signet-type itself there can be no doubt. The fashion of dress, the recurrence of similar types at Zakro and Hagia Triada, and the stratum in which the clay matrix was found, supply conclusive evidence as to this.

of Zakro, in the extreme East of the Island, which certainly do not come down later than the earliest L. M. I phase. The design on these, indeed, so closely reproduces the Knossos signet-type in all its details that it requires close examination to distinguish it from the other.[1] On a small sealing from a contemporary deposit at Hagia Triada (Fig. 500)[2] we meet with a somewhat variant version of a similar scene. The Goddess, who is here seated on a rocky knoll, grasps in her right hand the lower end of an elongated conical vessel offered her by a small short-skirted handmaiden, standing on a rocky incline opposite to her.

Similar sealing from Zakro.

Fig. 501. Fresco Fragment from Later Palace, Tiryns, showing Mouth of Animal drinking out of Conical 'Rhyton'.

No handle is here shown to the vessel; it is clear, however, that in all cases we have to do with forms of the conical type of the well-known Minoan vessels known as 'rhytons'.[3] The known examples of these are perforated at their lower extremity, and might be used either for libations, as fillers, or for drinking—as in some classical representations—by imbibing a jet of liquor from the outlet below. But there can be no doubt that in the scenes presented on these seal-impressions the outlet was provided with a stopper, and it seems probable that the Goddess was supposed to drink from it as from an ordinary chalice. A fragment of one of the Tiryns frescoes belonging to the frieze of deer (Fig. 501)[4] shows in fact an animal, of which only the

Conical 'rhytons' used as goblets.

[1] Hogarth, *The Zakro Sealings* (*J. H. S.*, xxii, 1902) p. 77, No. 3, Fig. 2, and Pl. VI. In the figure and on the phototype reproduction of Pl. VI no trace of the 'rhyton' itself is visible. A part of the curve of the outer handle is perceptible, however, on a cast of the sealing in my possession (see Fig. 499). The Goddess's arm is somewhat lower in the Zakro version, and a pillar of the lower part of the lateral shrine is clearly seen. The sealings may well have belonged to packages or documents sent from Knossos. Two specimens were found. For a further proof of Custom-house connexions with East Crete, see above, pp. 254, 255.

[2] F. Halbherr, *Resti, &c., Scoperti a Hagia Triada* (*Mon. Ant.*, xiii, 1903), p. 43, Fig. 38. Halbherr rightly recognized the type of the *dea seduta*, and though speaking of the vessel as 'un oggetto non ben determinato' compared the vase of the Cup-bearer.

[3] See Suppl. Pl. XXVII.

[4] Rodenwaldt, *Tiryns*, ii, Pl. XVI, 4, and p. 157.

mouth is preserved, drinking in the usual way from the upper rim of a conical 'rhyton'-like vessel.

The 'Palanquin Fresco'.

Fresco with sacerdotal figures and palanquins.

In the same basement in which occurred the clay signet with the sacramental scene described above, and in the same stratum, some remarkable fragments of fresco designs came to light. Several of the fragments exhibit portions of small figures –about one-eighth of the natural size—of sacerdotal aspect, one of them in a kind of palanquin, and seem to have been derived from the adjoining chamber West, which is also connected with the hoard of seal-impressions. There is in any case every reason to believe that this Section of the South-North Corridor which lies immediately North of the Staircase landing had here bordered sanctuary precincts.

The fragments, to which it is convenient to give the name of the 'Palanquin Fresco', apparently belonged to a single panel, and from their somewhat summary execution recall the 'Camp-stool' frescoes, to be described below,[1] found on the North-West Palace border. In the case, however, of the present group the evidence of the finding certainly points to the First Late Minoan Period.

The most important figured designs on these fresco fragments (Fig. 502, A) depict the heads and shoulders of two male personages wearing a white robe with a dark band, recalling the *clavus* of Etruscan and Roman usage. From other fragments we see that the robes here worn were of the long class that characterizes a special group of Minoan figures, often in a ritual or ceremonial connexion. Long-robed personages of an analogous class are seen on a series of gems, in one case holding a single-bladed axe and in another leading a sacred griffin, and others appear, with variations in detail, in the lyre-player and a female bearer of a libation vase on the Hagia Triada Sarcophagus. As already shown, a dress like the latter is worn by some of the figures of the 'Procession Fresco' at Knossos. There can be little doubt that such long robes were the mark of more than one kind of priesthood in the Minoan world, while the columnar object (coloured yellow) in front of the two figures may be part of a pillar shrine. The 'gaberdines' point to Oriental influence.

Together with the fragment (Fig. 502, A) representing, according to this view, two sacerdotal personages, were found others depicting parts of figures facing in the opposite direction. One of these (Fig. 502, C) is seated on a kind of folding seat like a wooden camp-stool, illustrated by other Knossian

[1] See Vol. iii.

wall-paintings and by the seal-impression figured above representing the 'Young Minotaur'. In the present case there are visible, in front of the remains of the seated figure, parts of one horizontal and of two upright

Parts of palanquin.

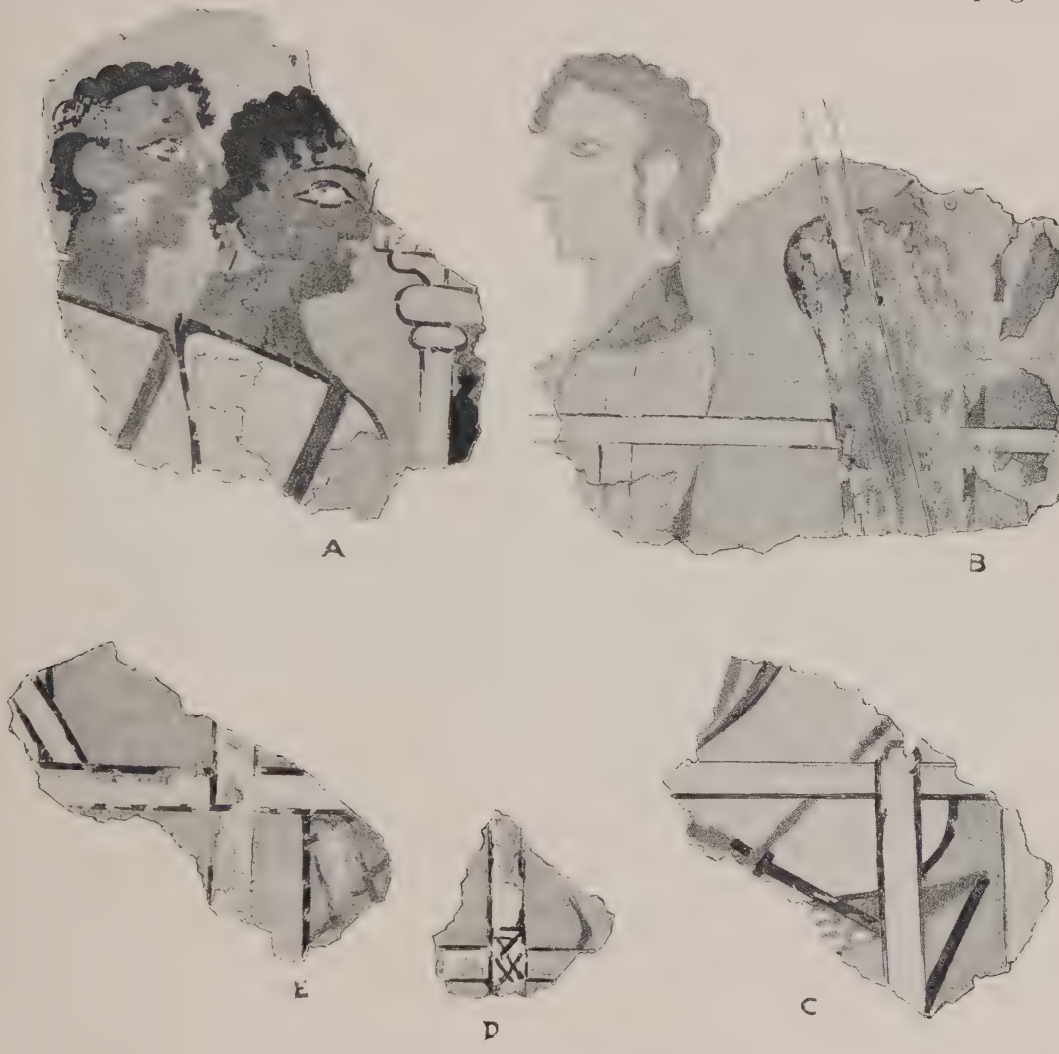


FIG. 502. PAINTED STUCCO FRAGMENTS BELONGING TO 'PALANQUIN FRESCO'.

bars, showing that the seat was set on some kind of stand. The upper part of a white-robed priestly figure of the kind described is seen, moreover, apparently walking between shafts belonging to a similar framework, and with his back to a kind of canopy in front of which a post slopes forward in palanquin fashion (Fig. 502, B). Further remains of the same wooden framework occurred on smaller fragments of the same fresco (Fig. 502 E, D, C).

Restored group.

This collocation of fragments has suggested a restoration of a complete scene, given in Fig. 503, showing two pairs of ceremonial bearers within the shafts of a kind of palanquin containing a seated figure.[1] Some latitude

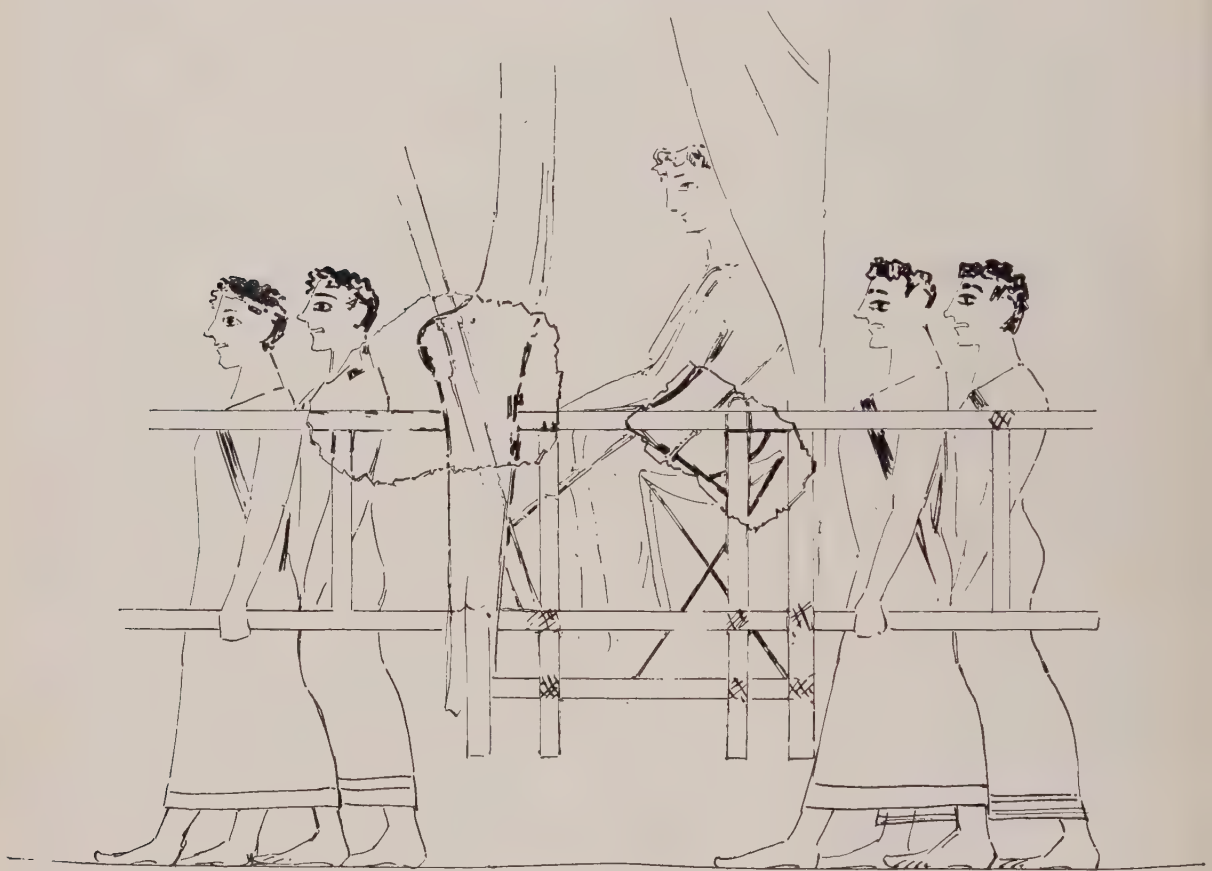


FIG. 503. PRIESTLY FIGURES BEARING PALANQUIN RESTORED FROM FRAGMENTS OF KNOSSIAN FRESCO.

must be allowed for details in the case of such a restoration, and one or other fragment may in reality belong to some other design of the same kind contained on the same fresco panel.[2] A further fragment, Fig. 502, E, may belong to another palanquin of a similar class.

A terra-cotta model of a palanquin associated with the remains of the miniature pillar shrine has already received illustration.[3] The narrow, raised

[1] Sketched, in accordance with my suggestions, by Monsieur E. Gilliéron, père.

[2] This would account for the slight variation in the width of the palanquin bars on some fragments.

[3] *P. of M.*, i, p. 220, Fig. 166, G, and above, p. 158, Fig. 80.

causeways of the Palace Courts would seem to have been specially designed that the bearers of such palanquins who, as on the above example, walked in single file between the poles, should pass dry-shod. In the present case it is specially significant that a *sedia gestatoria* carried by sacerdotal bearers, and in which a *Papa Re* may himself been accommodated, should have been discovered in connexion with a ceremonial line of access to the Central Court of the Palace from its Southern Portico. This, as has been shown, itself stood in relation with the direct route of approach to the pilgrim path leading to the Mountain Sanctuary of Knossos.

FIG. 504 A. SECTION OF PLUMES ON CROWN OF PRIEST-KING. (See below, p. 777, and compare ivory plume of Sphinx, Fig. 506 B, p. 777.)

§ 65. Ceremonial South-North Corridor: II. Painted Relief of Priest-King; Comparison with Young Prince on Hagia Triada Cup and Discovery of Intaglio representing Goddess with Sprinkler and Sword—Emblems of Spiritual and Terrestrial Dominion.

Remains of painted relief in North Section of Corridor; Evidences of Light-area opposite; Description of figure; Special significance of its waz-*lily crown; Peacock plumes as Minoan Sphinxes; Crowned personage a Priest-King; Similar* waz-*lily decoration of bronze basin from N.W. Treasury; Face as restored; Attitude of body; Long pendant locks of hair—Minoan and Libyan trait;* Waz-*lily collar; Indications of leggings; Technical process of producing stucco relief; L. M. I* a *date; Style of low relief; Sir William Richmond's appreciation of the work—great anatomical knowledge displayed; The thigh and leg; Probable downward action of arm; Was the Priest-King leading a sacred Griffin? Griffins on Palace walls; Griffin in Underworld on 'Ring of Nestor', as judge in scene of initiation; Background of relief, Elysian fields; Conventionalized Iris; Butterfly above—its Minoan versions; Butterflies as Minoan emblems of life after death; Symbolic eyes; Comparison of figure with Young Prince on H. Triada cup—similar attitude; His officer with symbolic attributes—sword and holy-water sprinkler; Discovery of gem showing Minoan Snake Goddess holding similar emblems of secular and spiritual dominion;* Aspergillum *of Roman* pontifices *compared; Similar wisp in relief on M. M. III sherd; Goddess as special patroness of Priest-Kings; Restoration on the spot of 'Priest-King' relief; Terminal section of Corridor opening on Central Court.*

The Priest-King Relief.

Remains of painted relief depicting Priest-King.

A discovery made in the elongated area immediately North of that which produced the 'Palanquin Fresco', and answering to the section of the Corridor that directly abutted on the Central Court, supplied still more striking evidence of its ceremonial character. Here, in fact, were discovered the remains of the remarkable painted relief of the personage wearing a plumed lily crown and collar, in whom we may with good reason recognize one of the actual Priest-Kings of Knossos.

The ground of the basement area shows a slight rise at this point, suggesting that the floor of the corresponding section of passage-way above had been here approached, as shown in the Plan, Fig. 490, B, by a couple of steps at its Southern border, so that it formed a separate architectural unit.

It was along the base of the Eastern wall of this section of the Corridor that the painted stucco fragments came to light, some of them quite close to the wall, and we must infer that the fresco relief had here stood. In relation to this, moreover, an interesting fact was established. In the opposite, Western section of the wall-line a gap occurred, pointing to the former existence of a small light-area on that side. Remains were traceable of the lower part of the North and South walls of this, and the back part of the longer wall enclosing it on the West was also found, consisting of rubble material, but with its face torn away, an interesting indication that it had once been covered by the ashlar masonry proper to such open areas.

Evidences of light-area opposite.

The light-well that we have such good reasons for inferring in this area had a special value, since by means of the opening—perhaps with a central column—in the West wall of the Corridor, a good light would have been thrown on the painted stucco relief set up, in accordance with the evidence, on the opposite Eastern wall. This relief, according to the final scheme of restoration, carried out for me by Monsieur E. Gilliéron, fils, in 1926, is shown in the coloured frontispiece to Part II of this Volume.

The crowned figure here presented is in low relief with a background of designs painted on the flat. This combination of technique also occurs in the great bull-grappling reliefs of the Northern Entrance, and, again, in the case of the 'Jewel Fresco' described above, on which a man's fingers appear in low relief attaching a necklace.[1]

Description of figure suggestion of flounced 'sash'.

We have here a male personage, of sinewy and youthful vigour, nude, except for the traces of foot-gear and his loin-clothing, the flap of which is behind, of the short habit usual in Cretan representation of the early part of the Late Minoan Age, in contrast to the long aprons of the earlier M. M. III fashion. With regard to the front part of this attire, of which only the Minoan 'envelope' has been preserved, an important indication was supplied by a fragment of the upper part of the right thigh that showed a fracture along a raised diagonal line suggesting the edge of a kind of descending sash with a flounced arrangement as seen on figures of both sexes belonging to the 'Cow-boy' frescoes. (See Suppl. Pl. XIII.) This decorative feature has accordingly been introduced into the restored figure.

Waz-lily crown: sacral significance.

He wears a crown of varied hues—indicative of inlaid metal-work—with beaded decoration round its lower borders, and conventionalized lilies rising above. It is to be noted that the lilies of the crown, as also those of the collar, are of composite formation, the upper expanding part being taken over

[2] *P. of M.*, i, p. 525 seqq. and Fig. 383.

from the sacred papyrus stem or *waz*, to the part played by which in Minoan Art many references have already been given.[1] It was the special emblem of Wazet or Buto, the Snake Goddess of the Delta.

FIG. 504 B. UPPER PART OF HEAD OF PRIEST-KING RELIEF WITH *WAZ*-LILY CROWN (for Plumes see Fig. 504 *a*, p. 773).

While we must recognize in this feature of the coronal a mystic Egyptian element the lily itself is pre-eminently the Minoan sacred flower. Ritual dances before the Goddess take place in a field of lilies.[2] On a signet-ring from the Candia district[3] a lily appears at the feet of the enthroned Goddess,

[1] See, especially, p. 478 seqq. above.

[2] See the gold signet-ring from Isopata, A. E., *Tomb of Double Axes, &c.*, p. 10, Fig. 16 (*Archaeologia*, vol. lxv).

[3] Seager Collection—of red steatite, much in the style of the gold ring from Isopata.

and on the great signet from Mycenae one of the offerings brought to the seated Goddess by her handmaidens is a bunch of lilies.

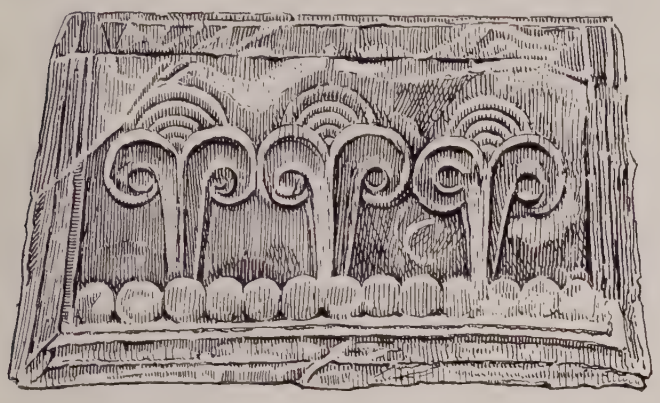


Fig. 505 a. Repoussé Gold Plate from Fourth Shaft Grave, Mycenae, showing *Waz*-lily Motive.

As a guide to the approximate dating of the relief itself certain composite *waz*-lilies on L. M. I *a* vases may be cited as near parallels,[1] and a good comparison is supplied by a repoussé gold plate from the Third Shaft Grave at Mycenae (Fig. 505 a) which also stands in a L. M. I *a* connexion.[2]

The lower petals are white with a red fringe and inner disk, and the upper part is blue—silver, gold, and inlays of Egyptian *kyanos* being doubtless indicated.

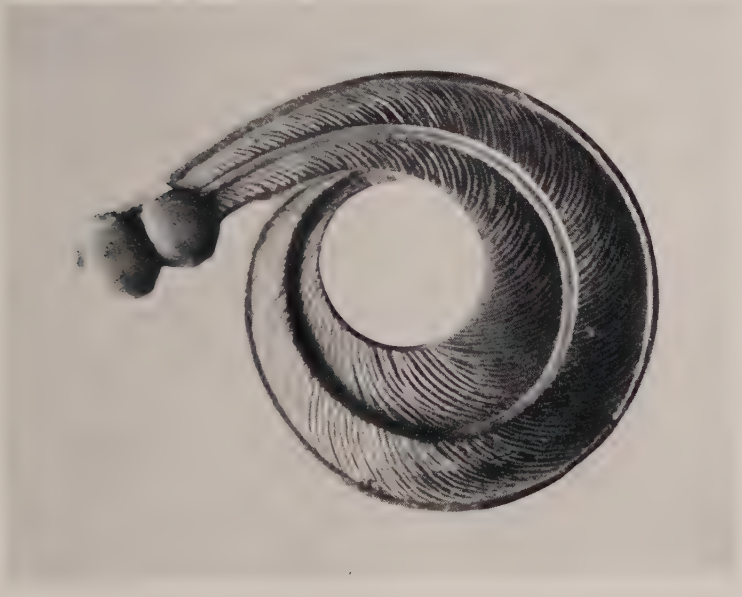


Fig. 505 b. Curved Plume of Sphinx: 'Ivory Deposit'.

Peacock plumes: as Minoan Sphinxes.

The central flower is surmounted by a taller *waz*-lily, to which are attached long triple plumes, flowing gracefully behind (see Fig. 504 a). These finely rendered feathers at once suggest those of a peacock, and part of one of the eyes of a deep blue colour has, in fact, been preserved. Their treatment strongly resembles a very beautiful ivory plume attached to a knob (Fig. 505 b)

[1] See, especially, p. 477, Fig. 285, *d*.

[2] The one painted Minoan vessel found in the Grave was of that date (Furtw. u. Löschke, *Myk. Thongefässe*, iv. 19).

which formed part of the 'Ivory Deposit' brought to light in the 'Domestic Quarter' of the Palace.[1] It seems highly probable that this ivory crest had surmounted the head-piece of a Sphinx, of the wings of which remains were found. Flowing plumes, attached to the projecting papyrus-lily of a crown, are indeed a regular emblem of the Minoan Sphinxes. Indications of such appear on signets, and ivory reliefs of somewhat late date are known

a *b*

Fig. 506. Sphinxes with Plumed Head-pieces: *a*, Papoura Zafer, Tomb 40; *b*, Spata.

exhibiting these features in some detail. An example of one of these occurred in one of the Chamber Tombs of the Zafer Papoura Cemetery[2] (Fig. 506, *a*), another (*b*) in the beehive tomb of Spata,[3] and one, in the round, from the Akropolis at Athens.[4]

Crowned personage, a Priest-King.

This connexion of the plumed lily-crown with the winged monster that the Minoans had adapted from Egyptian religious art is of high significance. A sacral character also attaches to the personage who walks before us, and he has every claim to be regarded as one who possessed something more than terrestrial sovereignty. We have here, surely, the representative

[1] A. E., *Knossos, Report*, 1902 (*B. S. A.*), and see *P. of M.*, Vol. iii. The Deposit was of M. M. III *b* date.

[2] A. E., *The Prehistoric Tombs of Knossos*, i, pp. 63, 64, and Fig. 69 (*Archaeologia*, 1906), Tomb 40. In this and other cases the rest of the crown is often summarily rendered.

[3] B. Haussoullier, *Bull. de Corr. Hell.*, 1878, Pl. XVII (repeated on a comb).

[4] Chr. Tsountas, Ἐφ. Ἀρχ., 1887, Pl. XII, B.

on Earth of the Minoan Mother Goddess—himself her adopted son—a Priest-King after the order of Minos. In other words we here recognize Minos himself in one of his mortal incarnations.

Similar *waz*-lily decoration of bronze basin from N.W. Treasury.

As regards the regalia of the painted relief, a most interesting comparison has already been supplied by one of the basins belonging to the hoard of bronze vessels brought to light in what seems to have been a supplementary Treasury of the Palace, just outside its North-West angle.[1] A section of the rim of this showing similar *waz*-lilies with beaded terminations below and flowing plumes above, here supplying decorative continuity, is given in Fig. 507. The bowl itself forms part of a magnificent service which bears the official stamp of having been used by the actual wearer of the lily-crown.[2]

FIG. 507. SECTION OF RIM OF BRONZE BASIN FROM 'PALATIAL HOARD', SHOWING PLUMED *WAZ*-LILIES.

Face as restored.

Unfortunately the face itself of the figure has not been preserved. It had been originally restored by Monsieur Gilliéron, père, somewhat on the lines of the portrait head of strongly 'proto-Armenoid' type belonging to the earlier dynast, on the M. M. II sealing already reproduced.[3] In the version, however, adopted in the revised restoration shown in the Frontispiece the facial type has been somewhat modified. From the small border of the forehead preserved it looks as if the face, like the designs forming the background of the relief, had been executed on the flat. This may be regarded as a symptom of the comparative difficulty experienced by the Minoan artists in moulding the human features as compared with their mastery over the more muscular parts of the human body. The ear, however, of which the upper part remains, is rendered in relief.

Attitude of body.

The youthful figure is shown with the head, thigh, and legs in profile, but with the upper part of the body in a facing position (see Fig. 508 and the section, Fig. 509). This attitude is very characteristic both of Minoan and of Egyptian art, and a good example is given below in the fellow relief of the 'Young Prince' on the Hagia Triada cup.[4] There are traces in the present

[1] See above, p. 637 seqq. and p. 643, Fig. 419 A.

[2] The crown itself and the *waz*-lily border of the bronze basin have been brought into an unitary relation in the design adopted for the covers of this book.

[3] *P. of M.*, i, p. 8, Fig. 2, *a*, and p. 272, Fig. 201, A.

[4] See below, p. 791, Fig. 516.

FIG. 508. UPPER PART OF BODY OF 'PRIEST-KING' FRESCO. (× — × SECTION, FIG. 509.)

case of tresses of a lock of hair falling down in front of the left breast and beneath the clenched hand. These locks are best traceable by the appearance of slightly incised sinuous lines that mark their margin, and their slight continuation below the fist can also be traced by this curious technical detail. Falling locks in this position form another constant feature of Minoan Art. This is already seen in the case of the terra-cotta relief from the 'House of the Sacrificed Oxen'[1] belonging to the close of M. M. III and was also copied by the Egyptian artists as a characteristic feature of the 'tributaries' from the 'Isles of the Middle of the Sea' and Keftiu land.[2] It has been shown above[3] that this method of letting the hair fall in long side-locks was shared from a very early date by the Libyan tribes,[4] and it is impossible to avoid the conclusion that the Minoan fashion was influenced from that side. It has

Long pendant locks of hair.

Minoan and Libyan trait.

FIG. 509. SECTION OF ARM AND BREAST OF 'PRIEST-KING' RELIEF: × — × ON FIG. 508.

already been suggested that the silver hair pendant worn by the 'Cup-bearer' in front of his ear may have been due to the same influence.[5]

The wrist that has been preserved bears a broad blue bracelet, and round the neck hangs a collar of lilies with round beads between them. These had been executed by means of some superficial layer—possibly gold foil—laid over the ruddy wash that covered the nude parts of the body, and the disappearance of this has left their outlines photographed, as it were, in deeper tones of Venetian red on the otherwise much faded surface. The loin-cloth shows a red and blue band near its border, and there are traces above the ankle of the sinewy left leg of a broad band with a border above and below. This undoubtedly was the upper band of leggings or puttees, such as are worn by the Young Chieftain on the Hagia Triada cup illustrated below in Fig. 516 (p. 791).

Waz-lily collar.

Leggings.

[1] See above, p. 753, Fig. 487. It will be seen that this terra-cotta torso shows the body more in profile, so that the right shoulder must have stood out in considerable relief from the flat surface to which the figure was applied.

[2] See, for instance, p. 746, Fig. 482, above.

[3] See the comparative types in Fig. 16, p. 34, above.

[4] See especially the head of a pre-dynastic (proto-Libyan) ivory figure from Hierakonpolis (Suppl. Pl. XII, *d*).

[5] See above, p. 706, and Fig. 442 A.

Technical process of producing stucco relief.

The technical method by which these stucco reliefs were executed has been already described in the first Volume of this work.[1] The basis was a rough moulding of the design in clayey plaster, the surface of which was scored for the better adhesion of the fine finishing wash, consisting of a pure lime medium and susceptible of the most delicate treatment. The plaster reliefs that can be clearly assigned to the initial phase of M. M. III, such as the remains of bull-grappling scenes from the Spiral Fresco Deposit, as well as some smaller fragments of possibly even earlier date seem to have been comparatively low. On the other hand, the magnificent bull's head belonging to a great composition above the Northern Entrance passage, belonging, as we shall see, to the transitional M. M. III–L. M. I epoch, shows in certain details, such as the eye and ear, the greatest possible amount of relief. So, too, the marvellously modelled fragments of parts of the human body from the 'Deposit of High Reliefs' on the borders of the great East Hall of the later Palace show the fullest development of form.

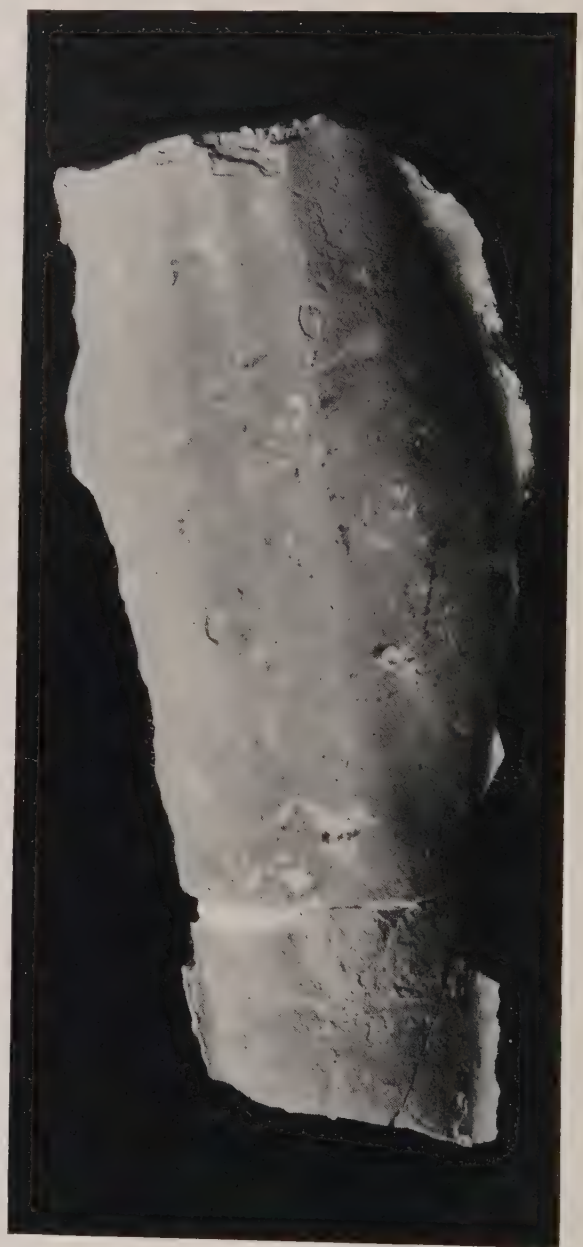


Fig. 510. 'Priest-King' Relief: Lower Part of Leg.

Certain comparative features and notably, the close approximation of

[1] *P. of M.*, i. p. 531.

the plumes to the Sphinx's crest from the Ivory Deposit (Fig. 505 b)—going back, certainly, within the borders of M. M. III *b*[1]—tend to place the 'Priest-King' Relief very early in the history of the restored Palace. Indications of early date.

We see here, indeed, in the lowness of the relief a survival of the earlier M. M. III tradition, as illustrated by the stucco fragments referred to. The preference for the earlier method in the present instance may indeed have been due to the fact that the relief belongs to a gangway, and not to a Palace hall. The work, itself, suggests a hand accustomed to reproduce the full contours of the human body, and somewhat embarrassed by the necessity of reducing them. The moulding of the torso, especially, is of a curiously compressed character, and, as compared with the free treatment of the high reliefs, reflects a certain mannerism. Style of low relief.

There is still evidence here, however, of a close study of Nature, though the hand, as usual, is weak, and the wrist lacks precision.

'The forearm', to quote the late Sir William Richmond, R.A., 'is more attenuated than the examples supplied by the Deposit of High Reliefs, still it shows anatomical knowledge, though less artistically displayed. The upper arm, especially in the treatment of the deltoid and of the pectoral group above the biceps, is not only accurate but admirably "seen". The various and subtle planes, including those of the biceps and triceps, are almost Phidian in their delicacy of transition. The two visible heads of the deltoid are in action. The trapezius is exquisitely modelled, exactly in its relation *qua* action to the other, quiescent muscles.'[2] Anatomical knowledge displayed in arm.

The waist, indeed, is unnaturally pinched in by the belt according to the usual Minoan fashion, but the sinewy thigh and the leg below is finely rendered (Figs. 510, 511). Thigh and leg.

From the faint muscular indications supplied by the small remaining part of the left arm, it seems to have been engaged in downward action. When this conclusion is taken in connexion with the sacral character of the personage before us, as shown by the plumed crown that he wears, it may be further inferred that his left hand, as indicated in the restoration given in the Coloured Plate, held some kind of cord or thong by which, according to a well-known scheme, he was depicted as leading a sacred animal. There Probably downward action of arm.

[1] See Vol. iii.

[2] From a written appreciation of the Relief kindly made for me by Sir William Richmond. Professor Arthur Thomson, F.R.S., who has also carefully examined the figure, writes: 'The larger masses of the right arm are well conceived, displaying a keen appreciation of the modelling of the structures of the anterior folds of the arm-pit, and the disposition of the deltoid muscles. The grouping of the muscles on the back of the arm is well suggested in a general sort of way, though lacking precision, especially in the region of the wrist.'

Fig. 511. 'Priest-King' Relief: Thigh and Upper Part of the Leg.

can be little doubt that this would have been a Griffin, such as on Minoan and Mycenaean intaglios is held in tether by divinities or priestly personages. A good illustration of this is supplied by a jasper lentoid from the Vapheio Tomb[1] (Fig. 512), on which a long-robed priest appears holding in leash a Griffin by a cord attached to the monster's neck.

Was the Priest-King leading a sacred Griffin?

Fig. 512. Long-robed Priest leading Griffin by Cord: Jasper Lentoid, Vapheia Tomb.

At other times, as we see from a lentoid intaglio shown above,[2] a collared hound is similarly led.

Griffins on Palace walls.

The Griffin stood in a specially sacred relation to the Minoan Goddess. On a painted stucco relief, probably contemporary with that of the Priest-King, from what appears to have been the Great Hall of the Palace on its Eastern side, a Griffin is tethered to a column[3] that seems to have here represented the divinity in her baetylic shape. In the somewhat later room of the West section[4] in which, with its throne and benches and the 'lustral area' annexed, the *Papa Re* of Knossos may well have held small consistories, the Griffin again plays a leading part. Painted stucco delineations of a pair of these sacred monsters—in this case mild, wingless, and peacock crested—were placed on each side of the throne itself and, again, on the doorway leading to an inner shrine.

Griffin in underworld as Judge in scene of initiation.

Something has already been said about the Griffin in Minoan religious art.[5] In the strong Minoan version the hawk's head of its Egyptian predecessor, such as we see it in the Twelfth Dynasty wall-paintings of Beni Hasan, had been converted into that of an eagle. It had legs of a lion, and thus personified all strength and swiftness, together with a piercing vision. Some remarkable evidence now supplied by the 'Ring of Nestor'[6]—

[1] Ἐφ. Ἀρχ., 1889, Pl. X, 32, and p. 167; Furtwängler, *Antike Gemmen*, Pl. II, 39. On a signet-ring found at Mycenae in 1905 a long-robed seated figure is seen holding a cord to which is attached a couchant griffin.

[2] See above, p. 765, Fig. 494.

[3] See *P. of M.*, Vol. iii.

[4] A description of the 'Room of the Throne' is reserved for Vol. iii of this work.

[5] *P. of M.*, i, p. 709 seqq.

[6] See Fig. 289, p. 482, above, and A. E., *The Ring of Nestor, &c.* (*J. H. S.*, 1925, and separately Macmillan's), pp. 68–70, and p. 65, Fig. 55. The object, a gold signet-ring,

a work contemporary with the Priest-King Relief—shows that the monster thus compounded had been impressed as a principal agent of the Goddess into a ceremony of initiation and discrimination, which seems to have ensued on the entry of the departed into the Elysian realms. Female figures with Griffin's heads are there seen ushering a pair of neophytes into the presence of an enthroned Griffin, behind whom the Goddess stands.[1]

Background of relief, Elysian Fields.

The field through which the personage with the plumed lily crown progresses is in keeping with the sacral subject. The exotic flowers and the six-winged butterfly that hovers over them are not of this World. The floral fragments that occurred with the relief and have been restored as part of the background may best be regarded as highly stylized versions of an iris type (Fig. 513).[2] They are executed with great delicacy, and the minute undulations visible on the edges of the petals recall this flower. Elsewhere, too, it appears as a sacred flower. On the great signet-ring of Mycenae a handmaiden of the Goddess bears to her in one hand a bunch of lilies, and in the other two sprays of iris. The palmette development on these and other examples may indeed well have been suggested by the branching yellow markings of the *Iris reticulata*, which to-day blooms so abundantly over the site of Knossos—the fairest harbingers of the Cretan spring. It is this that is undoubtedly the flower of the Greek Hyakinthos,[3] a divine favourite bound up—like the name itself—with the religion of the earlier race. It may even be that the mourning cry, AI AI, deciphered on its petal had first found its suggestion in the characters of the older script.

Conventionalized iris.

In these conventionalized floral sprays we already find the prototypes of the highly stylized plant decoration of the vases representing the Late 'Palace Style' of the succeeding Age—(L. M. I *b*–L. M. II). As usual, as has been shown to have happened in other cases, the vase-painters followed

which, from internal evidence, must be referred to L. M. I *a*, was found in a *tholos* tomb on the site of Nestor's Pylos (Kakovatos).

[1] For an illustration of the designs on the Ring, see above, p. 482, Fig. 289.

[2] The restoration of these, as shown in Fig. 513 and in the Coloured Plate (frontispiece), is fairly certain with the exception of the spiral terminations of the lower petals. These have been completed on the analogy of the terminal coils of papyrus spray on vases of the 'Palace Style'. A good example is supplied by a fine amphora from the Royal Tomb at Isopata, *Preh. Tombs of Knossos*, p. 15 and Pl. CI (*Archaeologia*, vol. lix). The buds on the wall-painting were also restored by M. Gilliéron from this vase at my suggestion. Another fine 'Palace Style' vase from the 'Little Palace' at Knossos shows similar features.

[3] See my *Mycenaean Tree and Pillar Cult*, p. 50 (*J. H. S.*, 1901, p. 148). Apollo Hyakinthos was a divine son or consort, evidently taken over from the Minoan religious cycle. Greve (Art. *Hyakinthos* in *Roscher's Lexikon*) says of the flower: 'es ist jedenfalls eine Irisart, aber unbestimmt welche'.

at a slightly later date the greater works that they found existing on the Palace walls.

The butterfly, Fig. 514, stands in the same decorative relation to natural prototypes as the floral types. Its appearance, indeed, in an exotic landscape, might be thought to be primarily a reflection from Egyptian Nile pieces where these insects are constantly seen fluttering above papyrus thickets.[1] Such motives unquestionably affected Late Minoan Art.[2] But, while the Egyptian butterflies in these river-bank scenes are often as literally rendered as if they had been taken from a Natural History book or even copied from pinned specimens in a case, the Minoan versions are for the most part decorative creations of an artistic school. As a rule, with their cusped, indented wings, showing large eyes, they combine characteristic features of the Comma and Peacock butterfly, the former a specially abundant species in Crete and Mainland Greece. Representations of this class already occur in Crete before the close of M. M. III, as, for instance, on the Zakro sealings, where in one case butterfly wings of the eyed, cusped kind are beautifully combined with the fore-part of a Sphinx. Of great interest, too, is the occurrence of butterflies with similar wings on what must be regarded as a votive bronze Double Axe from Phaestos[3] belonging to the

'Butterfly above', its Minoan versions.

FIG. 513. STYLIZED IRIS FLOWER IN FIELD BESIDE 'PRIEST-KING' (SPIRALS RESTORED).

[1] E.g. Wilkinson, *Ancient Egyptians*, ii (1878), p. 108, Fig. 2. Now in the Egyptian Department of the British Museum.

[2] On a very late painted clay sarcophagus from Ligertino, Crete (L. M. III *b*), a water-bird is seen amidst imitation papyrus tufts about to seize a butterfly. (Sketched by me on the spot; now in the Louvre.)

[3] A. Mosso, *Le origini della Civiltà Mediterranea*, p. 245, Fig. 261; *Ring of Nestor*, p. 56, Fig. 48.

transitional M. M. III *b*–L. M. I *a* phase, and an identical type is seen on the embossed gold plates found in the Third Shaft Grave of Mycenae, associated, as we have seen, with a L. M. I *a* 'rhyton'.

Butterflies as Minoan emblems of life after death.

The appearance, in this Mycenae grave, of figures of butterflies of the same type embossed on the plates of gold scales and associated with pendent gold chrysalises itself suggested a very definite religious intention. Schliemann (though he was rightly led to compare these funereal scales with the Egyptian weighing of the heart of the dead man by Thoth and Anubis against the 'feather of Truth'), curiously, missed the significance of the butterflies, and indeed mistook the gold chrysalises for 'grasshoppers'.[1] But the 'Ring of Nestor', which has afforded the first illuminating insight into Minoan beliefs regarding a World Beyond, shows that the chrysalis and butterfly were in truth regarded as symbolic of the reawakening of the soul by divine grace after the short sleep of death.[2] In the field of this remarkable signet, divided by the trunk and two lateral branches of the 'Tree of the World'—the Minoan Yggdrasil—the Goddess appears in the initial space with two butterflies fluttering about her head, and a pair of chrysalises above, followed in the second scene by the young couple, to whom they refer, about to set forth on their Elysian pilgrimage. In the lower scene the pair are in turn ushered into the presence of the enthroned Griffin—searcher of hearts—behind whom, again the Goddess stands, to receive them into the abode of bliss. In the light of this evidence it would seem that the embossed butterflies cut out of gold plate, found with the scales referred to, point to the idea of a weighing of souls as also having formed part of the initiatory examination.

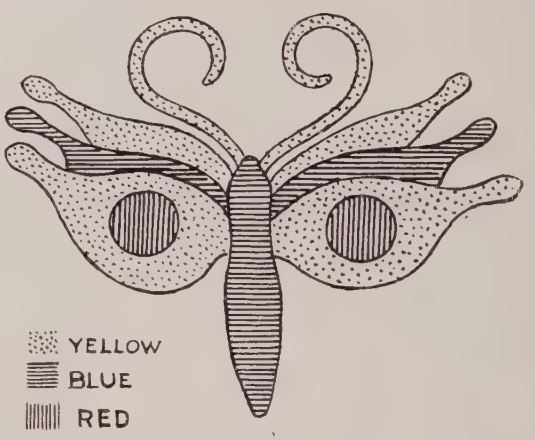


FIG. 514. BUTTERFLY BESIDE 'PRIEST-KING' RELIEF.

[1] *Mycenae*, p. 156, Figs. 259, 260, and note.

[2] A. E., *The Ring of Nestor, &c.*, p. 53 seqq. and see above, p. 482, Fig. 289. The chrysalises were in this case identified by Professor Poulton, F.R.S., the eminent archaeological authority, as those of the 'Common White' or 'Cabbage' butterfly (*Proc. Ent. Soc. Lond.*, 1924, lxxix seqq.). A golden chrysalis, much more naturalistically rendered than those of the Shaft Grave, was found by Mr. Wace and the excavators of the British School in a tomb of the Kalkani Cemetery at Mycenae (see *op. cit.*, p. 55, Fig. 47). A preliminary publication of this appeared in the *Illustrated London News*, Feb. 24, 1923, p. 684.

It thus appears that the popular idea of butterflies as human souls, so widely diffused in the remotest regions of the globe, had become a formal feature of the Minoan religion. In the heroic Age of Classical Greece the dead are likened to bats and birds.[1] But the very name for the insect, ψυχή, the 'soul' or 'life' of man, and the part which its personification, Psychê, plays later in Hellenic mythology, point to the survival and resurgence of the earlier underlying folklore of 'Greece before the Greeks'. To the Cretan peasant to-day butterflies are still 'little souls'.

Both at Mycenae and in Crete itself,[2] the butterfly, as the symbol of life after death, naturally plays a conspicuous part in jewellery designed for funereal use. The thin embossed gold plates presenting this motive with their small perforations for attachment may have been either sewn on to the grave-cloths or riveted to coffins. The religious value of the type is further illustrated by the appearance of summary figures of butterflies on seal-stones of the amuletic or talismanic class. These may either have served as charms to secure long life or as a protection against ghosts.

Fig. 515. Seal-impression from 'Little Palace', Knossos, showing Butterflies' Wings with Human Eyes.

The butterfly hovering over the Elysian blooms that rise beside the lily-crowned figure has the appearance of having six wings, Fig. 514. These are coloured successively yellow and blue, the yellow of the lowest pair showing two large red eyes, and each wing terminates in a slightly knobbed point, common to most of this decorative class as seen both in Crete and in the Mycenae tombs.

Symbolic eyes.

The eyes on these soul butterflies, to which such prominence is here given—taken over from certain *Lepidoptera*[3]—seem to have played a special part in Minoan popular fancy. On a clay seal-impression from the 'Little Palace' at Knossos we see them actually transformed into human eyes (Fig. 515).[4] This leads us in turn to a design on a remarkable gold signet-ring found in a built tomb at Isopata,[5] where a similar eye appears in the background of a scene depicting a ritual dance held in honour of the Goddess

[1] Compare *Od.* xi. 605, 633, and xxiv. 5.

[2] E. g. the butterfly plates from a tomb at Phaestos, *Mon. Ant.*, xiv, 1904, p. 601, Fig. 66.

[3] The large size of the body in this and other cases, and the well-marked bars that often appear on it suggest that at times certain features were taken over from the eyed hawk-moth (*Smerinthus ocellatus*).

[4] Repeated here from *P. of M.*, i, p. 705, Fig. 529, *d*.

[5] A. E., *Tomb of the Double Axes, &c.*, p. 10, Fig. 16 (*Arch.*, lxv). Cf., too, *Ring of Nestor, &c.*, p. 58, Fig. 51.

as the visible impersonation of the all-seeing presence of the divinity. The 'Eye of Horus', so familiar in Egyptian religious Art, seems to have supplied a suggestion of this symbolic usage;[1] we may even refer to the 'Eye of God' in the rayed triangle so familiar in old illustrated Bibles. On another signet it is coupled with the ear which also recurs in the background of a Minoan cult scene[2] with an analogous reference to an all-hearing Power.[3]

Comparison with 'Young Prince' on the Hagia Triada Cup.

'Young Prince' on H. Triada cup compared.

The Priest-King of the painted relief moves in Elysian fields amidst mystic blooms and butterflies from another sphere, and if his attitude be rightly interpreted, is leading a Griffin, wearing, like himself, the sacral lily crown. In contrast to this semi-divine impersonation the little relief on a cup from the Palace of Hagia Triada shows us contemporary portrayal of a Minoan prince in more mundane surroundings, and is reproduced in this place for the interesting comparisons it supplies (Fig. 516), here developed as it would appear on a flat surface.[4] If we may judge from the 'triple gradation' below, the architectonic significance of which has been already pointed out,[5] the design was taken from an original in painted plaster relief on a Palace wall. The great value of the little scene on the vase is that it gives in a practically complete form what it is almost hopeless to recover in the case of painted stucco remains otherwise than in an incomplete and fragmentary state.

The young Minoan prince is shown outside the gate of his residence, here indicated by the pillar of rectangular blocks[6] behind him, giving orders to an officer of his guard. Though in this case there seems to have been nothing more on his head than a band or simple diadem, the superior rank of the youthful chieftain is shown not only by his greater stature but by the decorations that he wears round his neck and arms. In addition to the

[1] The eyes on the butterflies' wings on the sealing from the 'Little Palace' illustrated in Fig. 515 certainly suggest this influence.

[2] It is seen on a gold signet, said to be from the Vapheio Tomb, and now in the Ashmolean Museum. See p. 842, Fig. 557. Both the 'eye' and 'ear' symbol are here seen in the field.

[3] On the votive bronze plate from the Psychro Cave (*P. of M.*, i, p. 632, Fig. 470) the object between the dove and the sacral horns may also probably be recognized as a human ear.

[4] Drawn by Mr. E. J. Lambert. For the shape and the 'poncho'-wearing figure, see Fig. 476, p. 743. A plain stone goblet of the same shape as that with the reliefs was found by Mr. Seager at Pseira (*Excavs., &c.*, p. 35, Fig. 15, *m*), probably in a L. M. I connexion.

[5] Vol. i, p. 687 seqq.

[6] Similar indications of buildings are seen on the wings of Minoan intaglio designs.

double ring or torque round his neck that he shares with his subordinate, there hangs from his shoulders across his chest a jewelled collar which, like his broad armlets and bracelets, have the appearance of having been set with

FIG. 516. 'YOUNG PRINCE' AND OFFICER ON HAGIA TRIADA CUP.

medallions. The hair with its long forelock and frontal curls [1] is confined by the band and falls down in abundant tresses over his left shoulder, reaching to his hips. His outstretched right hand rests on a long staff or sceptre, his left arm being lowered to the thigh. His only weapon seems to be a dirk with a knobbed hilt,[2] attached to his girdle according to ancient tradition.[3]

[1] This arrangement should be distinguished from the distinctive feminine fringe of regular curls.

[2] The dirk has not been noticed in any description of the figure known to me. Its knob shows minute punctuations, doubtless intended to represent ornament.

[3] Compare the M. M. I votive figurines like those of Petsofà.

Similar attitude.

The facing position of the upper part of the body, both in the case of the Young Chieftain on the cup and of the Priest-King of the painted relief, was very useful in each case in bringing into relief the official decorations. The neck-ring and more elaborate collar worn by both personages may have played the part of the 'torques' among the ancient Gauls as marking the rank or performance of the wearer. The collar of the Young Chieftain, like his armlets, seems to have been hung or set with bossed ornaments. The *waz*-lily collar of the other personage may well have stood for the highest of Minoan 'orders'. The lily, as already pointed out, was pre-eminently the sacred flower.

Officer holding out Sword and Lustral Sprinkler—Emblems of Temporal and Spiritual Dominion.

The Officer.

In strong contrast to the haughty and distinguished mien of the youthful Chieftain who thus appears is that of the officer who stands at attention opposite to him in a military attitude, with his heels together and his head very slightly bowed, and who seems to be receiving his commands. His jewellery is limited to a neck-ring and a single bracelet, and his hair is closely cropped, without curls or falling locks, but with a curious top-knot.

Holds sword and ritual sprinkler (*aspergillum*).

His attitude is that of a subordinate. He holds in his right hand a sword of the rapier class, and in his left a short staff terminating above his head in a flowing wisp. This curiously resembles the *aspergillum* or holy-water sprinkler used by the Roman *pontifices*.[1]

Have we here, as a complement to the sword presented—the token of secular power—an emblem significant of spiritual dominion?

An interesting discovery made a little South-East of the Palace greatly supports this conclusion.

Discovery of Gem showing Minoan Goddess with Sword and Sprinkler in Bronze Hoard, S.E. of Palace.

Discovery of gem

With the hoard of bronze vessels, which also included a painted ewer of L. M. I *a* style, brought to light near the middle section of the Stepped Portico

[1] It is somewhat remarkable that this comparison has not, so far as I am aware, been suggested by any archaeologist who has discussed this subject. Dr. Paribeni, indeed (*Rendiconti dei Lincei*, xii (1903), p. 324), compares the horse-hair wisps, set in wooden handles, used in Italy to drive off flies from horses, and which, it may be added, are generally in use to protect the person against flies in Egypt and other Eastern countries. Mr. H. R. Hall (*Aegean Archaeology*, p. 63) identifies the object with 'a long *falx*-like halberd', but a halberd of this flowing outline is an impossible weapon.

to the South-East of the Palace,[1] was found a remarkable cornelian intaglio. This was a bead-seal of the 'flat cylinder' type still fashionable at the beginning of the Late Minoan Age to which the hoard belonged, as it had been in the last Middle Minoan Period. The design (Fig. 517) is a female figure of matronly proportions with the usual flounced skirt, turned to the left on the impression, in which we have good warrant for recognizing the Minoan Goddess in a new impersonation, illustrating her special function as a patroness of the Priest-King, who was her Vicegerent on Earth.

showing Minoan Goddess holding similar symbols.

Fig. 517. 'Flat Cylinder' Bead-seal of Cornelian from near 'Stepped Portico' showing Goddess holding Sword and 'Lustral Sprinkler'.

In other respects she appears in the same guise as that in which she has already been seen in the case of the faïence and other images, with snakes coiled about her as symbols of her chthonic power, though here differently arranged.

Snakes symbolizing chthonic power of Goddess.

The tails of two of these start from the hem of the lower flounce of her skirt—the head of one of them rising with open mouth above her left shoulder. A third is coiled about her upper right arm, and there are traces of what may be serpentine coils about her back hair. The snakes rise at sharp angles from the horizontal lines of two lower flounces of the Goddess's skirt which seem indeed to be their continuation.

In her raised right hand the Goddess of the present intaglio holds a sword with a knobbed hilt and long blade, like that held before the Young Chieftain described above, but with two pointed projections on either side of the base of the hilt, which show that it belonged to the 'horned' type of sword common at the beginning of the Late Minoan Age.

'Horned' sword.

In her left hand, which is held downwards, she grasps the handle of an object with flowing streamers above, in which it is difficult not to recognize a somewhat summary rendering of the 'wisp' that the retainer holds before the 'Young Chieftain' on the cup, balanced in the same way by the sword.

Lustral sprinkler.

The singular resemblance of this to the *aspergillum* or 'holy-water sprinkler' of the Roman *Pontifices* has been noted above. This consisted of the hair of a horse's tail attached to a rod. Julius Caesar, as Pontifex Maximus, placed this implement amongst his insignia on his coins, the

Compared with *aspergillum* of Roman *Pontifex*.

[1] See above, p. 631, and Fig. 395, E.

reverse of one of which is shown in Fig. 518.[1] It is there coupled with the *apex*, or conical cup, and the sacrificial axe with the wolf's head. A holy-water sprinkler of a similar kind survived into the service of the Christian Church.[2]

Reappears on terra-cotta relief.

That this wisp, like the Double Axe, the sacral knot, and the Egyptian papyrus wand, was from an early date a recognized Minoan symbol, appears from the remains of a small relief on a sherd found in the M. M. III *b* deposit in the 'House of the Sacrificed Oxen', of which a restored drawing is given in Fig. 519. In spite of the missing part, there can be little doubt that it was intended to represent the same object.

FIG. 518. REVERSE OF *DENARIUS* OF JULIUS CAESAR: SHOWING *ASPERGILLUM*.

The many suggestions of ceremonies of lustration afforded by the appearance of sunken bath-like basins to which the name of 'lustral areas' has been applied above, as well as of font-like stone basins, make it very probable that some such holy-water sprinkler was in use in the Minoan Palace Sanctuaries. In ancient Crete, as in Rome, it may well have been a symbol of priestly functions.

Goddess as special patroness of Priest-Kings.

Here, then, the Minoan Goddess with her snake attributes, under the special guise in which she appears in the Central Palace Sanctuary, as Lady of the Underworld, holds the same double emblems of secular and religious authority. These, we may suppose, were on certain ceremonial occasions either grasped in his own hands by the Goddess's earthly representative, the Priest-King, or held before him by some attendant as in the case of the Young Prince on the Hagia Triada vase. If the identification suggested above[3] of the remarkable objects found in the small chamber of the early Palace of Mallia beside the royal *loggia* with the actual regalia of the Priest-King may be thought to hold good, we have, in that case at least, a close analogy. The marvellous long-sword with its crystal knob is there balanced by the steatite axe-head of purely ceremonial and religious use, carved in the shape of the forepart of a pard.

In the case of the 'Corridor of the Procession' which represents the

[1] This coin, a *denarius*, was struck in Gaul, *c.* 50–49 B. C. (cf. Grueber, *Coins of the Roman Republic in the B.M.*, ii, pp. 390, 391).

[2] Perret, *Catacombes de Rome*, v, Pl. IX, No. 18 *bis*; cf. A. Bouché-Leclercq, Daremberg et Saglio, Art. *Lustratio* (by E. Pottier), p. 1408, Fig. 4683.

[3] See above, p. 271 seqq.

continuation West of that containing the remains of the lily-crowned personage, we have seen that the section immediately preceding the exit on the West Court was marked by the lower part of a female figure magnificently attired and identified above with the Minoan Goddess. There is a fair presumption then that the short section of the present 'South-North Corridor' which intervenes between that occupied on its East side by the relief of the Priest-King and, *ex hypothesi*, of the sacred monster in his train, and the opening on the Central Court may have enshrined within it an effigy of the Goddess executed in a similar style. We may well believe that it depicted her under the same chthonic aspect as on the gem and holding, as there, the insignia both of spiritual and temporal power which could on occasion be transferred to her Vicegerent.

Was there also a relief of the Goddess?

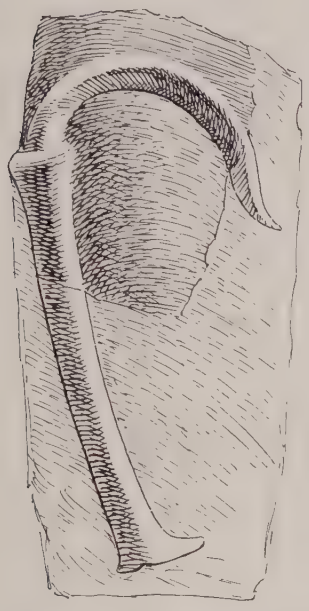


FIG. 519. 'LUSTRAL SPRINKLER' ON M. M. III *b* SHERD: COMPLETED.

To preserve—as in the case of the 'Cup-bearer'—a record on the spot of the 'Priest-King' Fresco itself, Monsieur Gilliéron, fils, has executed for me, on the basis of a cast of the existing parts, a coloured replica of the panel, as it originally existed. The adjoining section of the Corridor has been reconstituted, being partly roofed over to shelter the figure from the inclemency of the weather. For this the column of the adjoining stylobate has been restored, while to protect the colouring from the rays of the Westering sun, part of the walls of the little light-area beyond have been rebuilt (see Suppl. Pl. XXIX).

Restoration on the spot of 'Priest-King' relief.

The two steps visible in the centre of the Plate lead up to the Central Court of the Palace, a small section of its stylobate rising above them. Farther along the Western façade of this stood, as we shall see, the little pillar shrine which, together with the sanctuary structure behind it, marks the central point of the cult of the Great Minoan Goddess whose effigy appears on its sealings, and whose earlier snake-wreathed image was found in the adjoining Repository.

Approach to Central Court and sanctuary beyond.

§ 66. Double Façade of Palace on Central Court—Restored Columnar Shrine and Stepped Porch: the 'Central Stairs', and Sanctuary Quarter.

Entrance to Central Court from 'South-North Corridor'; Stylobate, marking new frontage of Court; Earlier wall-line behind; Rounded N.E. corner of the older orthostatic wall; Remains of earlier 'mosaiko' pavement; Later paving of Court; Statue of User in M. M. II b *stratum beneath this; Staircase from basement; Piers of upper columnar gallery; Stylobate of later façade laid down in M. M. III* b *fragment of 'Miniature Fresco' beneath it; Steps down to basement area; Vestiges of Columnar Shrine—two pairs of bases visible; Compartment between, answering to* cella; *Restoration of shrine—its small dimensions; Open areas behind wings; Deposit of seal-impressions with Minoan Rhea; Shrine on borders of sanctuary quarter; The 'Stepped Porch'—M. M. III magazine with cists below—traces of intermediate system involving interval of time; Discovery of second column-base within Porch; Green schist slabs of landing and gypsum threshold; 'Throne Room' system N. of Porch later construction; 'Sacral Horns' fallen from roof; Mr. F. G. Newton's restoration of façade of Palace on Central Court; Stepped cornice blocks; Evidences of 'Central Staircase'—stair-blocks with marks of steps; Remains of gypsum steps; Central Corridor; 'Tri-columnar Hall'—Pillar crypts below; 'Jewel Fresco' probable key to earlier decoration of Hall; Treasury chamber—Deposit of ritual vessels; Remains of numerous stone 'rhytons'—fluted vessels; 'Marble' vessel in form of Triton shell; Globular* alabastron *imported from Egypt; Spouted vase of faïence; Compared with silver vessel from Byblos tomb.*

Entrance to Central Court from S.–N. Corridor.

At the point where the South–North Corridor reaches the Central Court it steps up over a stylobate running from East to West—(restored in Fig. 520, together with the adjacent pavement slabs)—the well-preserved angle of which is seen about $3\frac{1}{2}$ metres West. This stylobate, which forms a prominent feature of the later Palace all along the West side of the Court and connects itself with a pillared portico, no doubt originally marked its Southern border in the same way. Owing to the slope of the hill, however, this part of the original plateau has suffered a good deal of denudation, so that from this point even the foundations of the boundary line on this side have disappeared. Incidentally, as will be seen from Fig. 520, a fine view

FIG. 520. ABUTMENT OF 'SOUTH-NORTH' CORRIDOR ON CENTRAL COURT; REPLICA OF PRIEST-KING FRESCO VISIBLE ON RESTORED WALL BEYOND, GLEN OF KAIRATOS.

opens from this point on the Kairatos valley and the glen below, showing the house of Said Bey, which was the original head-quarters at the beginning of the excavation on the site of Knossos. A good idea is also given of the upper section of the 'South–North Corridor' as restored, showing the replica of the 'Priest-King' Relief replaced in the position occupied by the original. (Compare Suppl. Pl. XXIX.)

Stylobate marking new frontage of Court.

The South-West corner of the Central Court thus entered shows good remains of its limestone paving slabs, round the inner edges of which remains of hard white stucco are preserved, which also cover the base of the stylobate and are rounded below so as to carry off the rain-water from the wall.

The limestone stylobate itself—traceable along almost the whole Western border of the Court—is a very interesting structural feature, marking, as it does, an extension East of the frontage of the West section of the Palace on this side, which was a most prominent feature in the scheme of restoration adopted after the great seismic disaster towards the close of M. M. III *b*.

Earlier wall-line behind.

At a distance, varying from about three-quarters of a metre to two metres, West of this stylobate there is visible the line of the original frontage, consisting of gypsum orthostats on a limestone plinth, which goes back, like the orthostatic wall that borders the West Court, to the early days of the Middle Minoan Palace. This Western Palace wall—as being an exterior wall—was thicker than that which bounded the Central Court, having a double line of orthostats with a rubble filling between. It was preceded, however, a little West of it, as already shown, by the still earlier proto-palatial wall of which the base-blocks still supply a record. It is possible, indeed, that the frontage along the Central Court may date back to this early epoch, since its Northern termination shows the same rounded outline, such as the old base-blocks indicate for what may have been the South-East corner of the same original Palace *insula*.

Rounded N.E. corner of old ortho-static wall.

Fig. 521 gives a view of the rounded corner of the older orthostatic wall on the side of the Central Court,[1] showing the lower block of a pillar on the new stylobate a little in front of it, and the door-jambs of the ante-room of the 'Room of the Throne'—a later structure—in line with it. The peak of Juktas is visible in the background.

Remains of earlier pave-ment.

In the section of the border of the Court that faced the right wing of the little shrine to be described below, parts of the older pavement were preserved along the plinth of the orthostatic wall, consisting of thick

[1] A view from a slightly different angle is given in *P. of M.*, i, p. 140, Fig. 102.

irregular slabs of iron-stone (ἀμυγδαλόλιθος) arranged in the manner known to our Cretan workmen as 'mosaiko'. This pavement, which was at a lower

Fig. 521. Rounded N.E. Corner of Earlier Orthostatic Wall ;. Pier and Doorways to Left of Later Façade Line on Central Court.

level than the later limestone slabbing, ran in places under the stylobate. In the section in question the interval between the stylobate and the earlier wall-line had been raised above this to a level answering to the later level

of the Court by means of a kind of cement largely composed of red earth, and it was on this that the deposit of clay seals connected with the little shrine had rested.

Of the later pavement of the Court itself the largest area preserved

FIG. 522. REMAINS OF LIMESTONE PAVING WITHIN N.W. ANGLE OF CENTRAL COURT.

Later paving of Court.

lies within its North-West angle, and here shows a regular arrangement of 'headers' and 'stretchers' (see Fig. 522 and General Plan A at end of Volume). Whatever earlier pavement had existed when this was made had been removed, the later slabbing having simply taken the place of a ground-level consisting, perhaps, mainly of beaten materials that must have existed here from the beginning of M. M. III. It resulted from this that the limestone slabs rested immediately on a stratum the date of which was well marked by the occurrence of M. M. II *b* sherds. It was in this stratum,

near the edge of an isolated patch of pavement, about a dozen metres from the first step of the Stepped Porch, that the diorite Egyptian statue of User was found, 70 centimetres below the surface of the later paving.[1] Statue of User in M. M. II *b* stratum below.

A good view taken from near the South-West corner of the Court

FIG. 523. VIEW FROM NEAR SOUTH-WEST CORNER OF CENTRAL COURT SHOWING EARLIER AND LATER FAÇADE LINES. THE UPPER PART OF THE RESTORED BASEMENT STAIRCASE IS VISIBLE WITHIN THE EARLIER LINE AND, BEYOND, THE RESTORED LANDING AND BORDERS OF CENTRAL STAIRS.

shows the relative position of the earlier and later frontage lines (Fig. 523). The gypsum blocks of the inner line, which are seen resting on their limestone plinth, make a turn forward, the continuation of this wall-line being restored beyond. Abutting on this are seen the steps of a reconstituted staircase leading up at this point from the basement to the *piano nobile* and upper verandah, the elements of which, including parts of gypsum stairs and Earlier and later frontage lines.

[1] *P. of M.*, i, p. 286 seqq. and Fig. 220.

Staircase from basement.

the upper and lower staircase blocks, were brought out by the recent supplementary researches, the result of which first made the restoration of the upper floor system here possible. Beneath the stairs was a narrow store-room in which was found the bulk of a deposit of clay tablets, belonging to the last Age of the Palace, containing lists of chariots and horses. With these were also the carbonized remains of a wooden chest with foliate decoration, in which the tablets had been contained.

Fig. 524. View looking West from Central Court showing Restored Section of Pillared Portico with Open Columnar Gallery above.

Piers of upper columnar gallery.

The limestone stylobate of the later façade is seen, stepping down slightly, a little in front of the earlier line, while beyond, partly replaced where they had fallen over, partly restored, appears a succession of the lower blocks of the gypsum pillars that had formed the outer portico on the level with the Court. A fuller reconstitution of a section of this, showing the restoration of a part of the upper columnar gallery above, is given in Fig. 524. It was, no doubt, to enable the architect to carry out the magnificently conceived façade of the restored building on this side with its tiers of porticoes and balconies that the borders on this side were brought forward. At the same time space was thus obtained for the 'Stepped Porch' which forms a prominent feature.

A diagrammatic plan, bringing out clearly the earlier and later façade lines, is given in Fig. 525.

A series of analyses of 'pure' elements beneath the great blocks of the stylobate of the later façade made in 1925, and carefully reviewed in 1926, has established the date of the structure beyond any reasonable doubt.

Later stylobate laid down in M. M. III *b*.

Here, as elsewhere—contrary to my preconceived belief that the new Palace fabric was frankly Late Minoan—consistent results derived from the sherds brought out showed that the blocks were laid down when the M. M. III *b* ceramic style was still in vogue. Among all the tests no single fragment occurred that could be assigned to even the earliest phase of L. M. I *a*.[1]

Fragment of 'Miniature Fresco' beneath it.

Of special interest, moreover, from the M. M. III association in which it lay was a small fragment of a 'miniature fresco', with incised lines, showing part of the stepped outer edge of an entablature of the same kind as that

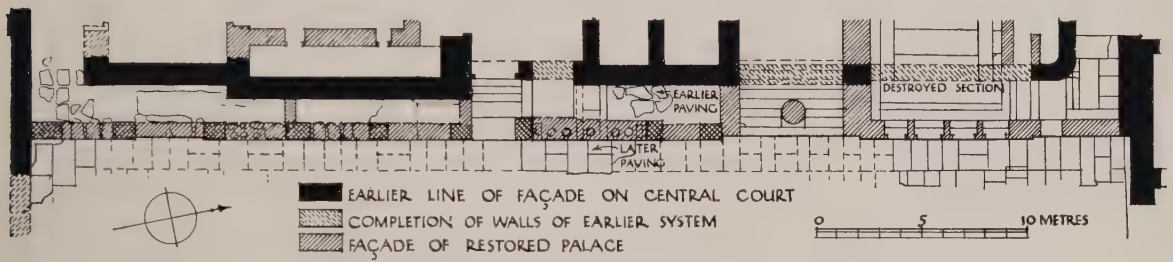

EARLIER PAVING
LATER PAVING
DESTROYED SECTION
EARLIER LINE OF FAÇADE ON CENTRAL COURT
COMPLETION OF WALLS OF EARLIER SYSTEM
FAÇADE OF RESTORED PALACE
0 5 10 METRES
DIAGRAMMATIC PLAN OF EARLIER AND LATER FAÇADES ON CENTRAL COURT

FIG. 525. DIAGRAMMATIC PLAN OF EARLIER AND LATER FAÇADES ON CENTRAL COURT.

seen in the Columnar Shrine of the well-known 'Miniature Fresco' found North of the Central Court, and illustrated in Fig. 371, p. 597, above.[2]

Steps down to basement area.

To the right of the first section of the façade as seen in Figs. 524, 525 there is an opening between two of the gypsum pillars of the lower portico to give access to a flight of steps leading down through an entrance lobby, named after the fallen column-bases there found, to the pillar crypts of this sanctuary quarter and to the whole basement system beyond. Against the North wall of this lobby was a stone bench with two pilasters.

Immediately North of this opening, filling an interspace about 5·30 metres broad between two gypsum blocks of the portico, vestiges appear on the stylobate itself of a very interesting construction.

Vestiges of Columnar Shrine in central section of façade.

Already, before these traces were noticed, the general aspect of this section of the façade and its conspicuous position on the Court had been taken to indicate that it had been occupied by an important structure. In

[1] The tests made are those marked in the Palace reference stores as 1925. 16, 17, 18, 19, 20, and 22. One or two pieces of 'tortoise-shell ripple ware' occurred of the same kind as those found in the M. M. III *b* 'earthquake stratum' under the pavement of the later roadway close to the South Porch, and had been first erroneously regarded as L. M. I *a*.

[2] This fragment was discovered under the second slab explored near the S.W. corner of the Court (1925, No. 17). Besides the M. M. III *b* sherds here found, were some M. M. II and a few earlier.

1901, moreover, the discovery was made, above the red cement floor of the area behind the Northern part of this section of the stylobate, of fragments of clay seal-impressions, showing the lion-guarded Goddess on a rocky peak with a worshipper in front and a two-storied pillar shrine behind. The further discovery, in a small area North of the Court, of the remains of the fresco design of the little columnar temple, with crowds of people of both sexes round it (see above, p. 597, Fig. 371), emboldened me to suggest in my Annual Report that these remains 'might supply a clue to the site of the miniature temple depicted on the fresco'.[1] The further evidence, now at our disposal, has so far borne out the truth of this conjecture in a modified form. It was not, however, the 'miniature temple' of the fresco itself that bordered the Court in the section with which we are here concerned, but, as will be seen, a shrine, of the same general character, with a narrower and one-columned central *Cella*.

It was ten years later that certain appearances, gradually brought out by successive winters' rains, first struck my eye, which may be thought to offer material for a definite conclusion.[2]

Two pairs of bases visible.

In the left wing of the section of stylobate in question there appeared clearly defined disks representing the lower ends of wooden columns, some traces of their carbonization showing in their partially blackened surfaces. Symmetrically disposed, again—with the same interval of 40 centimetres between—on the other side of what seems to have been the central *Cella*, two further disks of similar character had also become visible, one sign of the original position of the columns being in both cases the better protection of the surface of the stylobate blocks on which they had stood (see Plan, Fig. 526).

Compartment between them answering to *Cella*.

Almost exactly corresponding with the gap between the two pairs of bases there was a rectangular recess in the wall-line of the adjoining open lobby of the 'Room of the Column-bases', which had puzzled us from the beginning of the excavation, and had the appearance of a small ingle-nook and chimney. It showed on its right side orthostatic slabs, grooved for a post supporting an upper structure, and itself seems to have formed a little closet below with a good limestone paving slab, in which were found remains of a wooden chest with tablets of the Linear Script B. There could be little doubt, in view of the symmetrical relation of the recess to the traces of the two columnar wings of a structure on the stylobate in front, that this nook was in fact the lower compartment of the central cell answering to a little

[1] *Knossos, Report*, 1901, p. 30 (*B. S. A.*, vii).

[2] See A. E., *Restored Shrine in Central Court of the Palace of Knossos* (*R. I. B. A. Journ.*), 1911, p. 249 seqq.

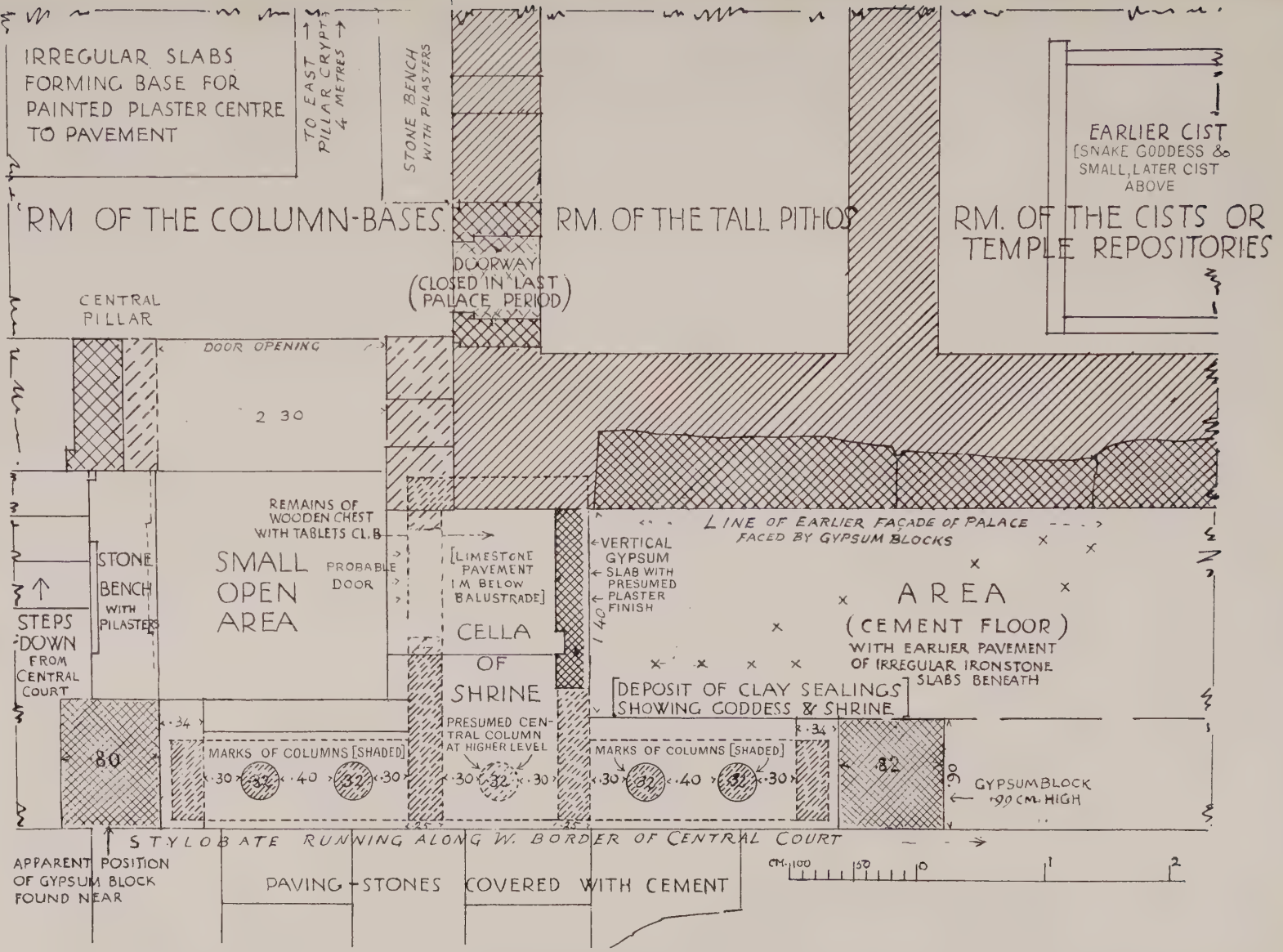

IRREGULAR SLABS FORMING BASE FOR PAINTED PLASTER CENTRE TO PAVEMENT
TO EAST PILLAR CRYPT 4 METRES
STONE BENCH WITH PILASTERS
EARLIER CIST [SNAKE GODDESS & SMALL, LATER CIST ABOVE
RM OF THE COLUMN-BASES
RM. OF THE TALL PITHOS
RM. OF THE CISTS OR TEMPLE REPOSITORIES
DOORWAY (CLOSED IN LAST PALACE PERIOD)
CENTRAL PILLAR
DOOR OPENING
2 30
REMAINS OF WOODEN CHEST WITH TABLETS CL. B
STONE BENCH WITH PILASTER
STEPS DOWN FROM CENTRAL COURT
SMALL OPEN AREA
PROBABLE DOOR
[LIMESTONE PAVEMENT 1M BELOW BALUSTRADE]
CELLA OF SHRINE
PRESUMED CENTRAL COLUMN AT HIGHER LEVEL
LINE OF EARLIER FAÇADE OF PALACE FACED BY GYPSUM BLOCKS
VERTICAL GYPSUM SLAB WITH PRESUMED PLASTER FINISH
1.40
AREA (CEMENT FLOOR) WITH EARLIER PAVEMENT OF IRREGULAR IRONSTONE SLABS BENEATH
[DEPOSIT OF CLAY SEALINGS SHOWING GODDESS & SHRINE]
80
82
.34
MARKS OF COLUMNS [SHADED]
.30 .32 .40 .32 .30
.90
GYPSUM BLOCK 1.90 CM. HIGH
STYLOBATE RUNNING ALONG W. BORDER OF CENTRAL COURT
APPARENT POSITION OF GYPSUM BLOCK FOUND NEAR
PAVING-STONES COVERED WITH CEMENT
CM. 100 50 0 1 2

FIG. 526. PLAN OF COLUMNAR SHRINE, AS INDICATED BY REMAINS, AND ADJACENT AREA.

chamber above, which had served as the actual shrine of the divinity, as shown in the 'Temple Fresco' and other Minoan representations of sanctuary buildings.

The careful measurements taken by Mr. Fyfe, as given in the Plan, Fig. 526, allow sufficient room for a central structure of this kind between the accurately delimited wings of the façade. From the space available, however, we are bound to conclude that in this case there had only been a single column in the central cell, thus differing from the bi-columnar arrangement seen in the Miniature Fresco, but paralleled by that of the small gold shrines from the Mycenae Shaft Graves and of certain signet-rings and seal-impressions. What is abnormal, indeed, is the bi-columnar arrangement of the wings, but this may well have been due to architectural considerations connected with the general espacement of this section of the Palace borders.

Restoration of columnar shrine: its small dimensions.

In the restored drawing of the little shrine, given in Fig. 527, the model supplied by the Miniature Fresco has been generally followed,[1] and the same colouring is here suggested. Naturally, the original may have varied greatly in detail, but the reconstruction here adopted has at least an illustrative value. The small proportions of the building, as shown in the fresco, are clearly indicated by the comparative size of the seated figures of ladies beside it which point to a height of about 9 feet, while the restored elevation of the *Cella*, as here shown, is about 13 feet in accordance with the proportions supplied by the actual remains. It is quite possible, however, that on the wall-painting the size of the seated figures was somewhat exaggerated. The fresco design cannot certainly be regarded as a nicely measured architectural elevation, and some latitude is allowable in the proportions given. The plan itself, as already noted, is variant in the two cases, the central compartment having only, *ex hypothesi*, a single column, while the wings have two in place of one.

The reconstructed Shrine is 16 feet 6 inches—about 5 metres—in width —and the two wings are 9 feet ($2\frac{3}{4}$ metres) in height, thus corresponding with the depth of the central compartment. A comparison of the Plan, Fig. 526, with the restored façade will give a good idea of the little shrine,

[1] The entablature and coping differs here from that given by me in the *R. I. B. A. Journal*, 1911, p. 294, and Fig. 3, where the incorrect restoration of the fresco was followed. In both cases I have omitted the chequer work beneath the half-rosette band, so as not to raise the height of the narrower, single-columned *cella* disproportionately. The suggested colouring of the background has been altered in order to bring out the fact that the *cella* was more closed in. In the fresco the background of the *cella* is blue, that of the left wing Venetian red, and that of the right wing yellow.

as we are able to reconstruct it on the basis of the existing remains and with the guidance supplied by the Miniature Fresco.[1] It seems probable that the parts of the structure coloured a yellowish brown and here copied

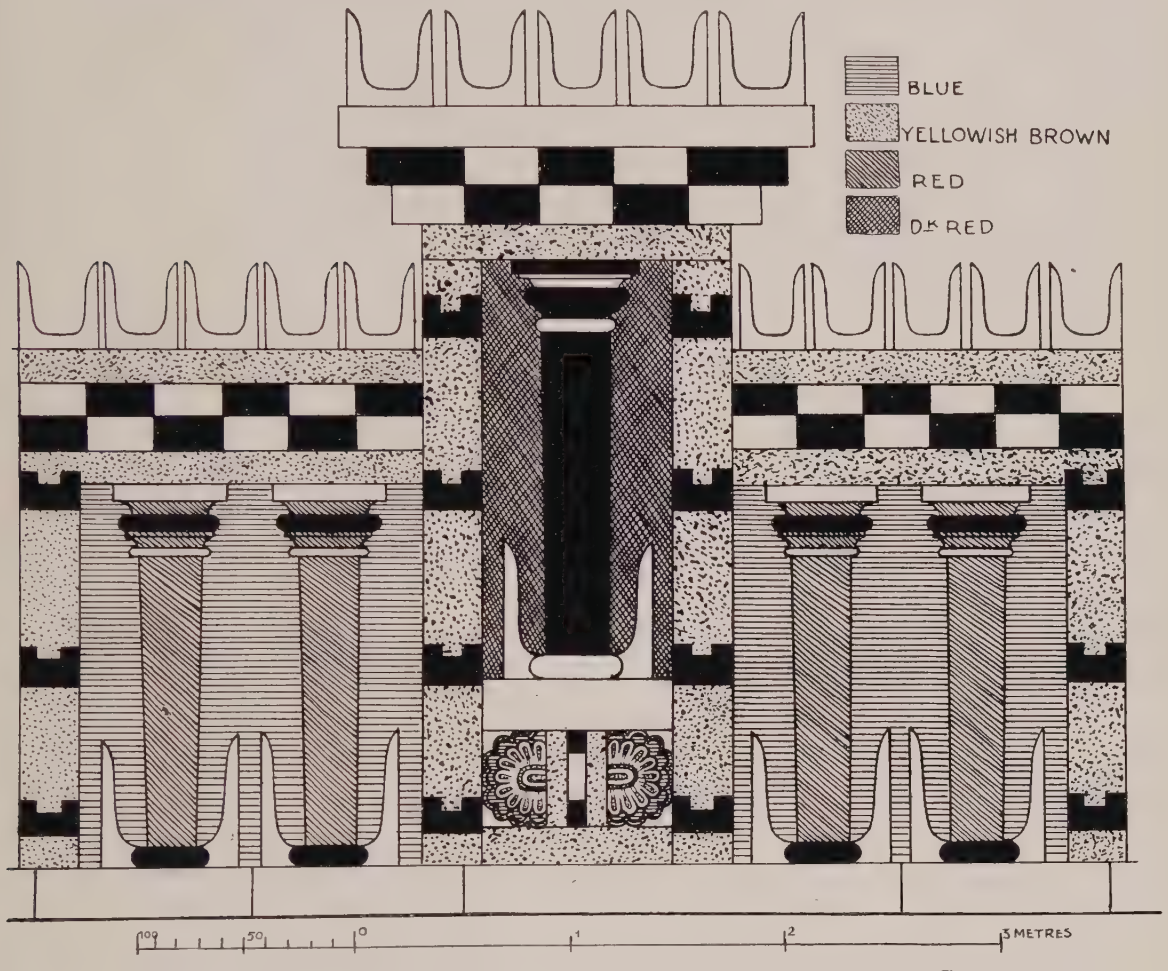


FIG. 527. RESTORED ELEVATION OF COLUMNAR SHRINE ON CENTRAL COURT.

were of woodwork. The upright posts are represented as if they were in sections, mortised into the ends of transverse beams painted black. But the repetition of this latter feature may be simply of a decorative nature.

[1] That the stylobate in this case was also painted white may be gathered from the fact that remains of a white stucco facing are preserved on the limestone slabs that supported the right wing of the Shrine. This facing, moreover, as was observed by Mr. Noel Heaton, goes down behind the cement step that covers the junction of the stylobate with the pavement of the Court.

The painted stucco fragment showing part of the entablature in the miniature style, found under a block of the stylobate, warrants us in any case in believing that the façade of a small shrine erected on the Palace borders at the time of the great rebuilding would not have essentially differed in its details from the little temple already illustrated in Fig. 371, p. 597, above.

Open areas behind columnar wings.

The evidence before us certainly points to the central division as having contained the real 'holy of holies'. The two wings would have been open, that to the North bordering a small elongated area between the stylobate and the earlier façade, on the pavement of which were found the fragments of the clay seal-impressions already mentioned. The Southern wing, on the other hand, bordered a square open area about 2 metres in depth and breadth, on the left side of which, with its back against the descending steps of the entrance passage, was a stone bench, facing, on the other side of the area, the nook representing the lower part of the *Cella*, in which sacred objects may well have been displayed. These would thus have been in full view of persons seated on the bench opposite. The little area itself may in fact be regarded as a kind of fore-hall of the Shrine.

Deposit of seal impressions with Minoan Rhea.

Of the character of the divinity in whose honour this little columnar shrine was erected the numerous remains of broken seals, all representing the same religious scene, here found, convey some definite information. The fragments lay about 70 cm. from the surface, beneath a deposit of burnt wood. They were mainly concentrated on the South-East corner of the area behind the North wing of the façade, but others were scattered about within a range of some feet, and one was found in the basement immediately West. They were impressed by the same signet, and though no single example of a perfect impression was found, it proved possible to complete one by another and by means of overlapping pieces to restore the complete design as reproduced in Fig. 528.[1] The central figure on the peak is clearly the Minoan Mother Goddess, here, as elsewhere, shown with her lion supporters. The peak itself may stand for that of her holy mountain, Juktas, and the pillar sanctuary behind her possibly represents, in the abbreviated fashion usual with seal-engravers, her actual Palace shrine. On its roof and in front of its columns are placed the 'Sacral Horns'.

Other fragments of seal-impressions found near, executed in the same style, belonged to variant versions of a similar scene. In one case the lions stand on the ground on each side of the rocky peak.

[1] Cf. *B.S.A.*, 1901, p. 29, Fig. 9. This was drawn for me by means of the overlapping fragments by Monsieur E. Gilliéron, père.

Attention has been already called to the significance of this attachment of the central Palace sanctuary to the cult of this Minoan Rhea, the tradition of which survived on the site in that of her classical successor.[1]

The Shrine on borders of sanctuary quarter.

There is a good deal of evidence that this section of the façade bordered a part of the building specially devoted to religious usage. In a small chamber immediately beyond the section of the old façade wall that borders the area where the seal-impressions were found are the two large cists that acted as the repositories of temple treasure in the preceding M. M. III Palace. That the tradition of this dedication outlived the great seismic catastrophe is shown, moreover, by the smaller cists that were set over the earlier 'Temple Repositories'[2] at the time of the Restoration; though the sanctuary relics seem to have been at this time mainly transferred to another treasury chamber.

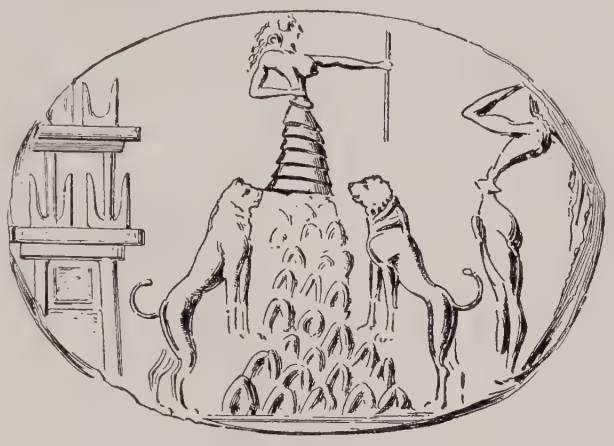


Fig. 528. Seal-type from Deposit by Columnar Shrine showing Minoan Rhea on Peak, with Guardian Lions, Votary, and Shrine.

At the back of the little area described as the fore-hall of the shrine and the adjoining 'Room of the Column Bases', a double opening gave entrance to the Eastern Pillar Crypt, with its two vats for the overflow of libations poured before its central support, and thence into the still darker vault beyond.

It will be seen that the little shrine of the Goddess fronted what had been a distinct sanctuary area of the Palace, the religious character of the basement remains being repeated, as we shall see, in that of the three-columned Hall that lay above the Pillar Crypts. More than this, it will be found that the principal cult objects derived from the Treasury Chamber of this Sanctuary Hall—the libation vessels in the shape of lions' and lionesses'

[1] Diod. lib. v, c. 66. See p. 7 above.

[2] The section given in *P. of M.*, i, p. 454, Fig. 326, is much too low, only having been taken up to the height of the topmost existing step. The schist pavement is thus extended East over an area really covered by steps 5–12. The remains of the smaller intermediate column-base had not then been recognized. The *pithos* C in the section is called 'L. M. I', but it must be preferably described as of transitional M. M. III *b*–L. M. I *a* fabric.

heads—stand in an obvious relation to the cult of the Minoan Rhea, illustrated by the signet impressions from the North wing of the 'Columnar Shrine'.

This little building with its two-columned wings, separated by the raised but narrower *Cella*, formed a central feature of the façade, which, while harmonizing with its general structure of open porticoes, must have attracted the eye by the exceptional variety and colour of its decoration.

The 'Stepped Porch' and 'Central Staircase'.

The Stepped Porch.

The recess on the right of the shrine, between the later stylobate and the older façade wall, was closed in on the North by the most important functional structure of this part of the frontage—the 'Stepped Porch', namely, that gave access to the Court from the central halls and staircase, and, indeed, from the whole *piano nobile* of the Western Quarter of the Palace.

M. M. III magazine with cists beneath steps of porch.

The flight of steps—twelve in all—descended above from a landing that lay immediately over an old M. M. III Magazine, with 'kaselles' resembling the neighbouring 'Temple Repositories', and, indeed, forming a continuation of them Northwards.

Evidence of intermediate system, involving interval of time.

This Magazine must have been remodelled after the catastrophe, the slabs of its new gypsum lining rising above the side slabs of the earlier cists, as shown in the diagrammatic drawing by Mr. Fyfe (Fig. 529).[1] Remains of a *pithos*, moreover, was found standing on the new floor above the 'kaselles'. The *pithos* itself was of a transitional class that may have belonged to the very last 'post-seismic' phase of M. M. III *b*, but its presence shows that an appreciable space of time had elapsed between the actual filling in of the old 'kaselles' and the construction of the porch above. The rebuilding, indeed, of this section of the Palace may have been somewhat gradually carried out through a period of years. In this case the final decoration of the walls of the restored parts of the Palace may well belong to a date that comes properly within the limits of L. M. I *a*. This conclusion would help to explain the apparently somewhat advanced character of the 'processional' form of decoration, which may, itself, have been carried out throughout this whole quarter. This processional scheme of decoration is, in fact, indicated in Mr. F. G. Newton's restored drawing of the Stepped Portico included in Fig. 532.

[1] The evidence is further complicated by the existence at one point, between the East border of the early cists and the original line of the old façade, of three floor-levels. See Section, *Knossos, Report*, 1904 (*B. S. A.*, x), p. 31, Fig. 9; and cf. *P. of M.*, i, p. 454, Fig. 326.

The steps, of which four were preserved, are of peculiar hard, rather rough limestone, identical in its character with the material used in the later flight of stairs that descends East from the 'Upper East-West Corridor'. This correspondence is of interest from a chronological point of view, since

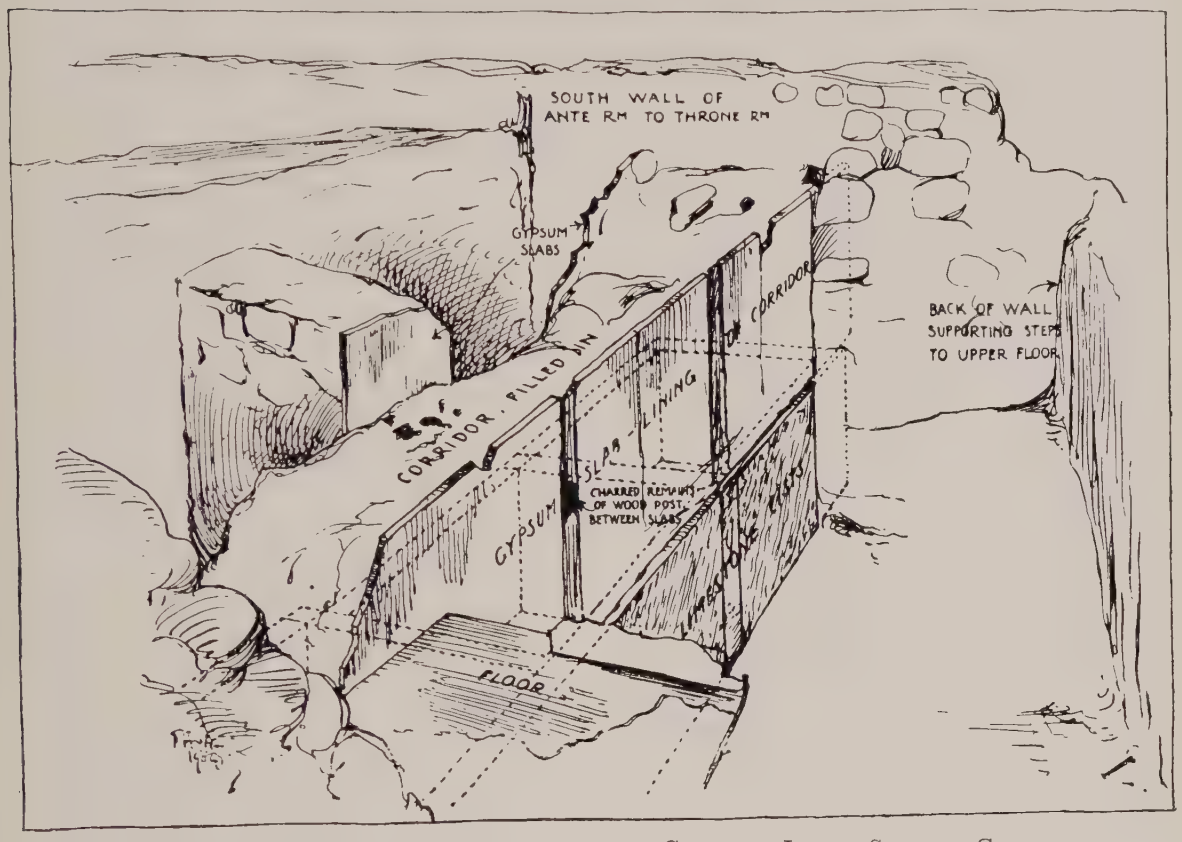


FIG. 529. SKETCH SHOWING EAST SIDE-SLABS OF CISTS AND LINING SLABS OF CORRIDOR BELOW LATER VESTIBULE. BY THEODORE FYFE.

in the filling beneath the East stairs L. M. I *a* pottery occurred[1] together with a considerable admixture of M. M. III *b* sherds, but nothing later. It looks, therefore, as if both structures belonged to the very beginning of the First Late Minoan Period. This confirms the evidence already afforded by the

[1] Numerous remains of vessels, including 'flower-pot' vases and numerous finely contoured cups with the L. M. I *a* grass pattern, were found in the filling beneath the East stairs. But there were also fragments of M. M. III *b* 'medallion' *pithoi*, pedestalled vessels with a bossed centre, the prototypes of those found at Phylakopi (*Phylakopi*, pp. 117, 118, Fig. 110), and characteristic M. M. III pots with the drip ornament. The blocks are incised with a square mark.

traces of intermediate occupation between the closing of M. M. III cists and the construction of the steps above.

Between the beginning of the second and the farther edge of the fourth step is inserted a column-base 1·15 metres in diameter, and itself rising from a square base 1·35 metres wide. This column-base would have answered to a column about 5·75 metres high.

Discovery of second column-base within Porch.

In the course of the supplementary explorations of 1922 there came to light, in a basement space below, a segment and part of the lower square base of another gypsum column-base, which finds its natural position between the ninth and eleventh step. When restored (see Fig. 530) it showed a diameter of about 0·85 centimetre, answering to a column 4·25 metres high, which would correspond with the height that a second smaller column, starting from its higher level, should have attained beneath the roof of the Porch.

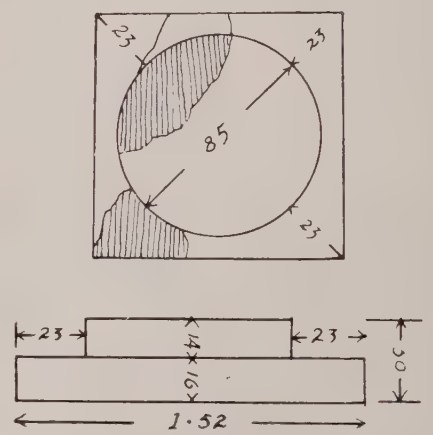


Fig. 530. Intermediate Column-base of 'Stepped Porch', restored.

Green schist slabs of landing and gypsum threshold.

In the basement area, answering to the landing of the steps, were heaped together numerous greenish-blue schist slabs of the kind used in the interior corridors of the restored building, which had formed a base for its cement facing, and others occurred within the Northern of the two door-openings. A gypsum threshold slab belonging to this was also found, and the general arrangement of the entrance doorways could be fixed with approximate accuracy. A restored view of the steps, also showing the first flight of the 'Central Stairs' above, is given in Fig. 531.

'Throne Room' system N. of Porch later construction.

In the area beyond the Northern boundary wall of the landing of the 'Stepped Porch' and Vestibule, the remains of the original scheme of reconstruction in the epoch immediately following the great Earthquake has been entirely destroyed by drastic alterations carried out in the last period of the Palace. It was at that time, as is clearly shown from the character of the wall-paintings and other evidence, that the 'Room of the Throne' was built with its ante-chamber and dependencies,[1] and the construction here on the lower level of the double hall, evidently intended for important pontificial ceremonies, involved a more revolutionary treatment of the earlier façade line

[1] The 'Room of the Throne' and its Ante-chamber, &c., will be described and illustrated in *P. of M.*, iii.

on this side than in the part described above. Whereas in that case the

FIG. 531. STEPS AND COLUMN-BASES OF PORCH, AS RESTORED, WITH FIRST FLIGHT OF 'CENTRAL STAIRCASE' BEYOND.

record of the original frontage line was still preserved, behind the later, throughout its whole course, the gypsum orthostatic wall that would have

originally traversed the ante-chamber from South to North was entirely removed, only reappearing at the curving angle beyond (see Plan, Fig. 525). The further course of the Magazine containing the 'kaselles' that lay immediately within the old façade wall was also entirely cut off by the new structures.

Sacral horn of stucco fallen from roof terrace.

Mr. F. G. Newton's restoration of Palace façade on Central Court.

One discovery made in connexion with the ante-chamber here—which seems to have been of a single story, surmounted by a roof terrace—has probably a very general bearing as to the roof line both of the earlier and later Palace. Just outside its North-East corner, evidently fallen from above, was found the remains of 'sacral horns', composed of fine hard plaster with a clay core. In Mr. F. G. Newton's fine restoration of a section of the façade of the building facing the Central Court (Fig. 532) this feature is repeated.

Though some minor details must remain uncertain, Mr. Newton's drawing may be regarded as giving a very accurate idea of this frontage as devised by the architect of the restored Palace. The system of porticoes and verandahs which supply such a varied and light effect was itself only made possible by the happy inspiration that had brought forward the new façade some three metres in front of the older wall-line. This structural change was, as already noted, specially useful in dealing with the Stepped Portico, the lowest step of which corresponds with the edge of the pavement.

With its high roof, supported by a second raised column, and the surface of its side walls covered, we may believe, with frescoes continuing the great processional scheme of the West Porch, the Stepped Porch itself must have formed a monumental feature on this side of the Central Court.

Stepped cornice blocks.

Near its Southern pier was found a stepped cornice block (see Fig. 531) of a type that was evidently general in Minoan buildings, and has been adopted in the restored drawing of this façade. A detailed sketch of it by Mr. Fyfe is given in Fig. 533, B, together with a variant form (A) found near the South-East angle of the 'Little Palace'.[1] Near this frontage were also brought to light the two small limestone half-capitals shown in Suppl. Pl. XXX,

[1] Attention has been already called to the employment of stepped supports of the same kind as consoles, e. g. in the case of the faïence specimen from the 'Temple Repository' (*P. of M.*, i, p. 512, Fig. 368). The stucco plinth of the 'Griffin Frieze', to be illustrated in the next Volume, was of similar form. In the restoration both of the S. Propylaeum and the 'Queen's Megaron', capitals of this stepped form have been introduced above piers and pillars.

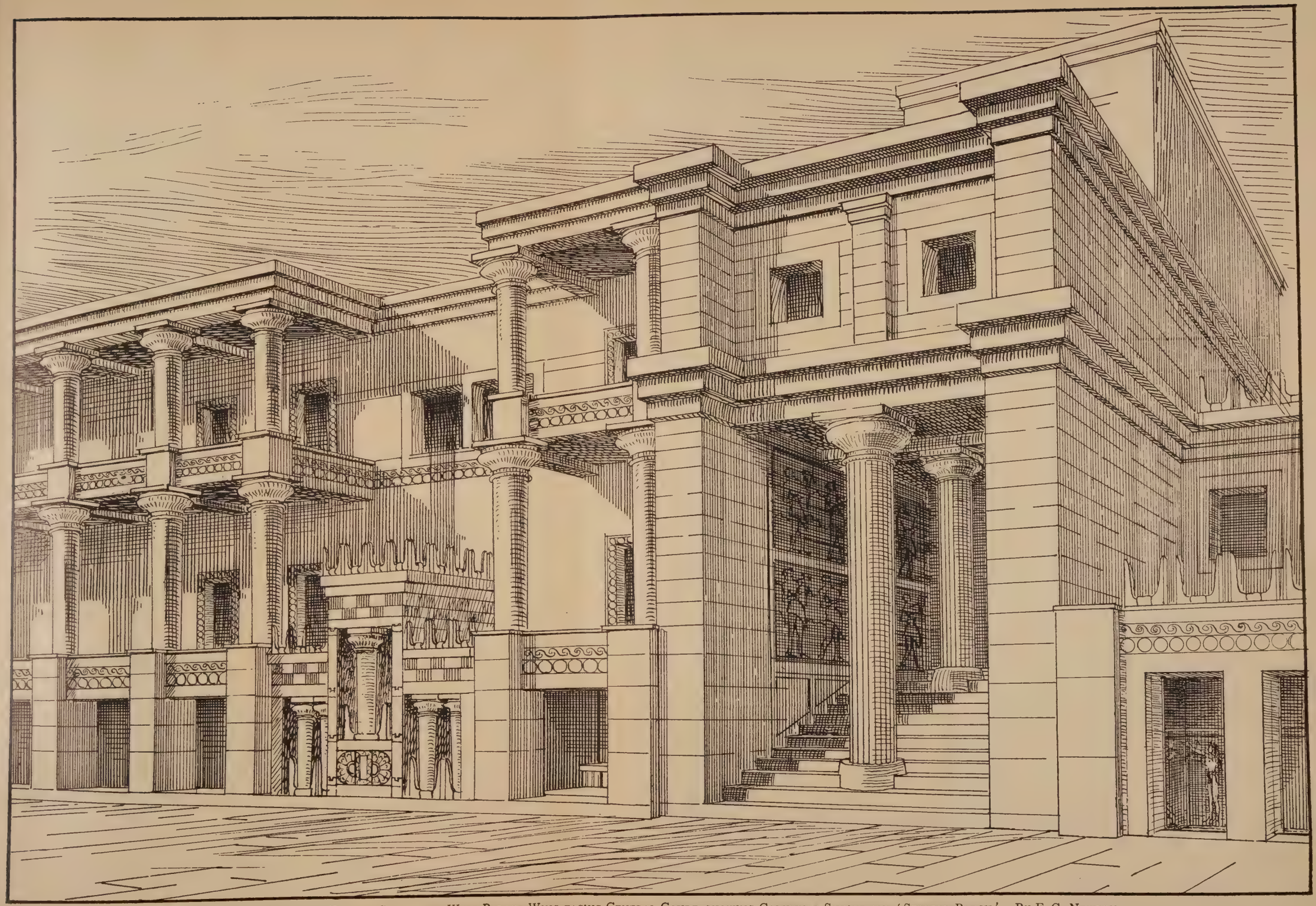


FIG. 532. RESTORED VIEW OF SECTION OF WEST PALACE WING FACING CENTRAL COURT, SHOWING COLUMNAR SHRINE AND 'STEPPED PORCH'. BY F. G. NEWTON.

a–c. Of these, that with a bossed contour and angular ribs (*a*, *b*) is unique of its kind, while the other (*c–e*) looks like the half of a quatrefoil design. Both present the stumps of tenons on their upper surface, but what decorative purpose they may have served it is impossible to say.

As seems to have been usual with the Palace entrances, it looks as if there had been a doorway opening into a narrow lodge, marked here by the basement walls, which might have been used by a Warder or Porter.

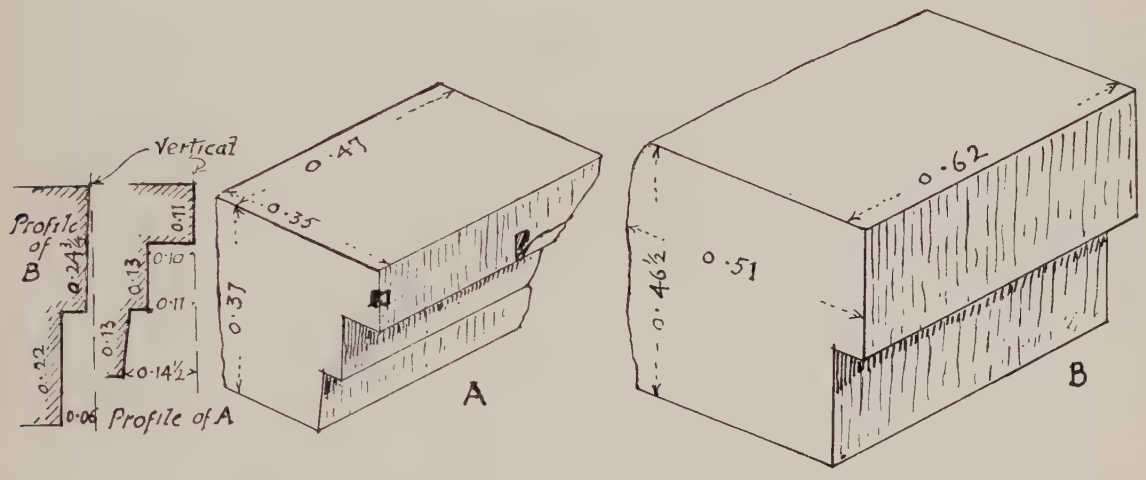


FIG. 533. LIMESTONE CORNICE BLOCKS OF STEPPED FORMATION: A, FROM NORTH-EAST CORNER OF 'LITTLE PALACE'; B, FROM NEAR 'STEPPED PORCH'.

Evidences of central staircase.

It had at first been supposed that the elongated area to which the 'Stepped Porch' led had either represented a long hall or a double corridor with a dividing wall that answered to that which formed the line of separation between two Magazines below. The supplementary researches of 1922, carried out in the light of much greater experience of upper story remains, brought out the true solution of the problem. The Southern section of the area in question proved indeed to be a through passage; that on the North side of the line of division showed itself to be the Central Staircase of this quarter of the building.

Stair blocks with marks of steps.

About four metres West of the inner border of the pier dividing the two doorways of the porch, a gypsum block, resting on the wall beyond, and only slightly sunken from its original level, had long been a familiar feature of this part of the site. A careful examination of this now brought out the fact, made clearer no doubt by successive winters' rains, that the Northern face of this block presented a stepped ledge, together with the blackened

traces of the outline of four steps above, corresponding with this, Fig. 534, *a*. There was here supplied, therefore, the clear evidence of a flight of stairs ascending from this point and occupying the Northern section of the area approached by the Portico. At a point just West of this, fallen into the basement area known as the 'Magazine of the Vase Tablets', was found another, smaller block of gypsum, Fig. 534, *b*, bearing the outline of two more steps. Remains of several of the steps themselves also came to light, and have been worked into the flight of sixteen steps, as now completed.

Sunken remains of gypsum steps.

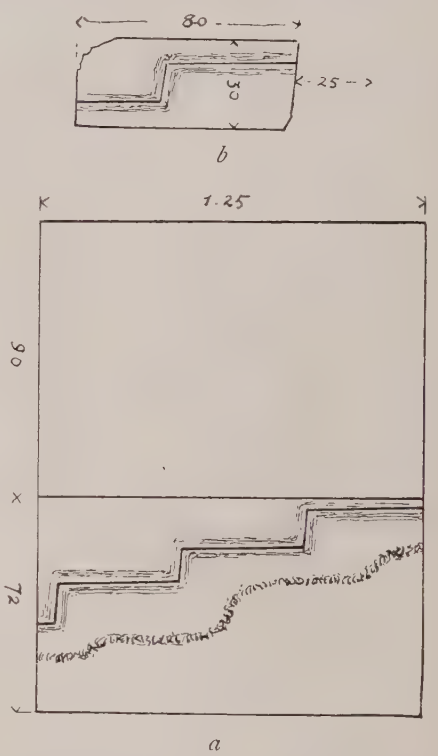


FIG. 534. *a*, GYPSUM STAIR-BLOCK SHOWING LEDGES AND MARKS OF STEPS; *b*, PART OF ANOTHER.

From its landing a second flight of, perhaps, nine more steps led up to the second floor-level. The large gypsum block below clearly answered to a small balustrade at the bottom of the stairs, the column of which has also been restored. A view of the reconstituted flight of stairs is given in Fig. 535 (cf., too, Fig. 523). They may be described as the 'Central Stairs' of the West Palace wing.

Central Corridor.

The Corridor entered from the left door-opening of the Portico ran parallel with the Central Staircase system on the right, giving a direct route of access to the Upper Long Corridor and the spacious Palace halls that opened on its Western flank. A passage above the Fourteenth Magazine seems indeed to have afforded a through route to the 'North-West Corner Entrance' of the Palace,[1] and the stepway leading down to the 'Theatral Area' and 'Royal Road'.

At the end of this Corridor, where it reached the doorway (restored in the Plan, Fig. 536) giving on to the Upper Long Corridor, it took a turn at right angles under the landing of the first flight of the 'Central Stairs', and two projecting gypsum blocks marking the opening of this have survived in position, resting on the lower walls.

Entrance to Tri-columnar

It is clear that the Corridor was entered directly on its Southern side from the very important 'Tri-columnar Hall', the approach to which from

[1] See above, p. 590 seqq., and Plan, Fig. 369.

the Upper South Propylaeum through the intervening lobby has been already described.[1] A group of four doorways has been restored in the Plan, Fig. 536. A through route to the Central Court was thus supplied from the whole Southern section of this wing of the Palace as well as from the North-West.

Sanctuary Hall.

Fig. 535. Stair-block in Position with Marks of Ascending Steps, and with Restored Column and First Flight of Central Staircase.

Views of parts of the 'Tri-columnar Hall' have been given above on p. 351, Fig. 199, and p. 717, Fig. 449, with the floor restored in ferro-concrete and the fallen column-bases replaced in position above the pillars and central dividing pier of the crypts below. As these pillar crypts belong to the early elements of the Palace, it seems probable that the Columnar Hall itself in its later shape substantially represents a remodelling of one that had long existed. A hint even of its former decoration has been supplied by the beautiful, though fragmentary, coloured relief known as the 'Jewel Fresco' and illustrated in the First Volume of this work,[2] which was found near the floor

Columns answering to pillars and pier of crypts below.

[1] See above, p. 716.

[2] *P. of M.*, i, p. 526, Fig. 383, and cf. p. 312, Fig. 231.

Jewel fresco, probably derived from earlier hall.

in the basement underlying the adjoining Corridor.[1] This fresco shows the fingers of a male attendant fitting a necklace with gold beads and pendent negroes' heads, apparently round a lady's neck, and the close analogy that it presents to the wall-paintings of the 'Ladies in Blue', depicting toilet scenes—which had such a wide range throughout the Palace in the early phase of M. M. III—suggests that a glorified form of this decorative scheme, in which low relief was preferred to figures on the flat, had been carried out in this central hall.[2] This exquisite fragment which had been placed in the Museum of Candia was, unfortunately, pulverized by the recent Earthquake.

Interior arrangement of later hall.

The approach to this 'Tri-columnar Hall' from the lobby North of the Upper Porch of the South Propylaeum has already been described.[3] It was lighted on the West by the open area of the Upper Long Corridor, and the base of a window-opening on this has been here reconstructed. The Hall was divided into three sections (see restored Upper Plan C, at end of Vol.), the two North of the line of column-bases being divided by a corresponding line of narrow bases, two of which were found resting on the supporting walls below, practically in position. Superposed over a basement wall was here, too, a gypsum block showing the blackened traces of two small columns, the exact significance of which it was impossible to discover. As already suggested, a line of doorways, restored in the Plan, Fig. 536, would have given access from the Northernmost section to the Corridor leading to the 'Stepped Porch'.

Pillar crypts below.

For the special sanctity of the pillar crypts below the 'Tri-columnar Hall' we have now, as already pointed out, a whole series of analogies. That the Sacred Double Axe, repeated on almost every block of the pillars, had a distinct religious meaning—notwithstanding the fact that they were, most likely, covered over with plaster—is clearly shown by the association of the pillar in other cases with the stepped pyramidal stand for the ritual Axe itself.[4] On a vase fragment, indeed, from one of the tombs at Old Salamis

[1] In a *loculus* of the same basement was also found a deposit of tablets of Class B, referring to vases, many of them of metallic types.

[2] I had already made this suggestion in *P. of M.*, i, p. 526. The discovery, since made (cf. p. 680 seqq., above), that the 'Ladies in Blue' scheme formed the decoration of the Corridor that preceded that with the processional figures greatly supports this view. Among other small decorative fragments found in the same basement were some showing a pattern of the 'notched plume' class with wavelets between waves, painted on the flat.

[3] Pp. 716, 717.

[4] For instance, in the Pillar Crypt of the South-East House (*P. of M.*, i, p. 427 and Fig. 307) and of the South House.

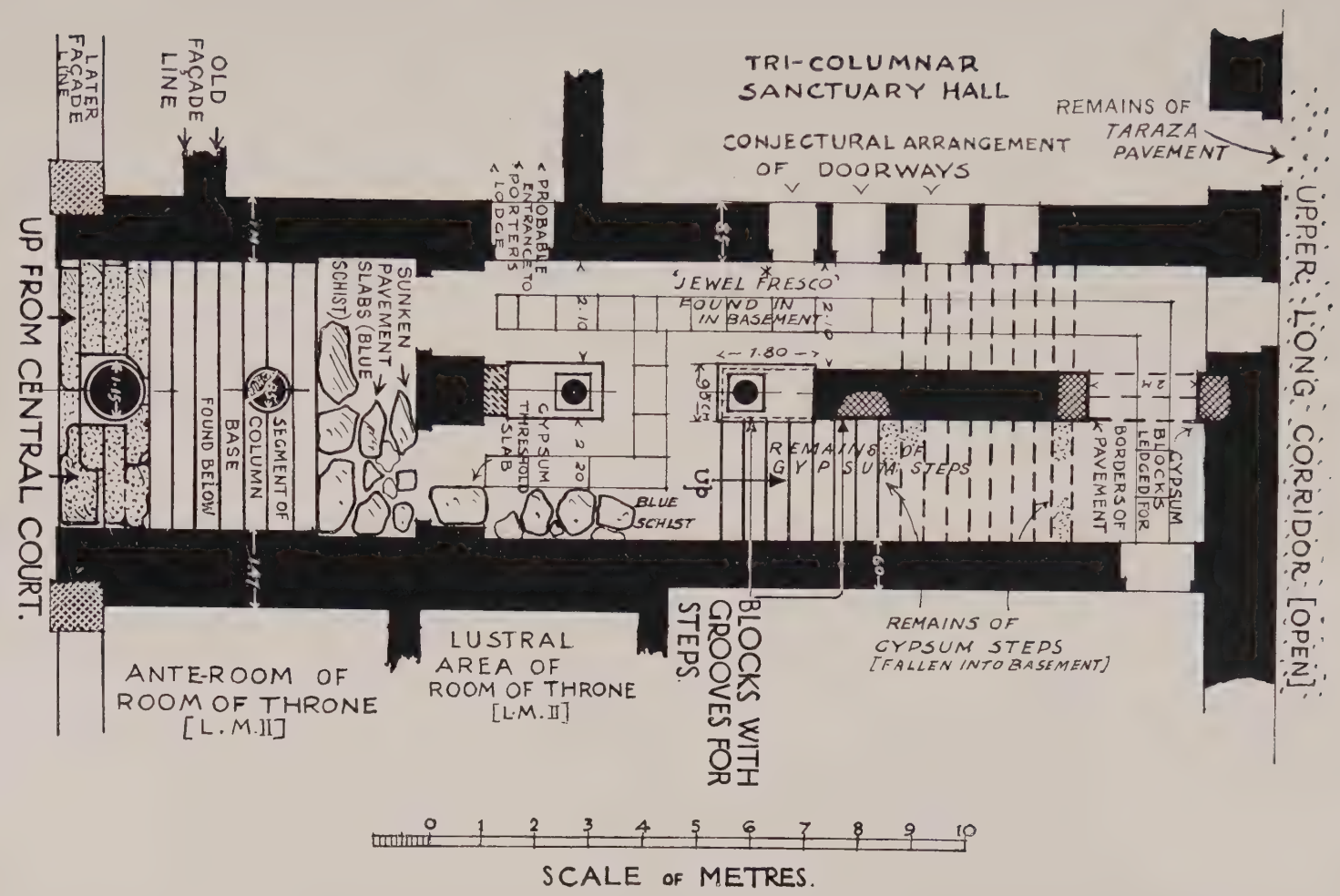

TRI-COLUMNAR SANCTUARY HALL
REMAINS OF TARAZA PAVEMENT
CONJECTURAL ARRANGEMENT OF DOORWAYS
UPPER LONG CORRIDOR [OPEN]
LATER FAÇADE LINE
OLD FAÇADE LINE
PROBABLE ENTRANCE TO PORTER'S LODGE
'JEWEL FRESCO' FOUND IN BASEMENT
UP FROM CENTRAL COURT.
SUNKEN PAVEMENT SLABS (BLUE SCHIST)
SEGMENT OF COLUMN BASE FOUND BELOW
GYPSUM THRESHOLD SLAB
BLUE SCHIST
REMAINS OF GYPSUM STEPS
GYPSUM BLOCKS LEDGED FOR BORDERS OF PAVEMENT
BLOCKS WITH GROOVES FOR STEPS.
REMAINS OF GYPSUM STEPS [FALLEN INTO BASEMENT]
ANTE-ROOM OF ROOM OF THRONE [L.M.II]
LUSTRAL AREA OF ROOM OF THRONE [L.M.II]
0 1 2 3 4 5 6 7 8 9 10
SCALE OF METRES.

FIG. 536. RESTORED PLAN, SHOWING STEPPED PORCH WITH THROUGH CORRIDOR TO LEFT, AND CENTRAL STAIRS TO RIGHT.

in Cyprus female figures are actually seen in the act of adoring what seem to be the pillars of the interior of a building.[1]

The East Pillar Room here, too, was provided, as in several other instances, with a vat on either side for the overflow of libations poured before it.

The architectural function of such a 'pillar of the house' was to support a column in a corresponding room above, and there is evidence that the more public form of the worship took place in this upper chamber. In the 'Little Palace' we have seen that various sacred relics, including part of a Double-Axe stand of steatite, as well as the magnificent bull's head 'rhyton' were found in a cavity on its borders.[2] The column in the room above the pillar crypt of the South House seems to have been also accompanied by such a stand,[3] and here, contained, it would seem, in a wooden chest or closet, was found a service of silver vessels [4] that may well have been of ritual usage.

Treasury Chamber of the Sanctuary Hall and its Ritual Contents.

Treasury chamber off hall.

There is evidence that in the present case this upper columnar hall—which had, *ex hypothesi*, a sanctuary character—was flanked by a little room that served as a treasury of ritual vessels.

The length of the 'Tri-columnar Hall' was 11·81 metres from North to South, and its extension from East to West almost exactly the same. Its entrance system from the Lobby adjoining the Upper Propylaeum, restored in the Plan C, did not, as already noted,[5] centre with that of the Propylaeum itself, since the Southern border of the Hall extended somewhat East of that of the Lobby. This arrangement gave space in the South-East corner of the Hall for access to a small square room, one gypsum jamb of the doorway of which was preserved.

Deposit of ritual vessels.

The little chamber, of which we have here the outline, derives great interest from the fact that above the floor-level of the corresponding basement space were found the remains of a whole series of stone vessels of varied materials, most of them clearly designed for cult purposes, together with a teapot-like faïence vase and other relics. The basement space itself was thus known at the time of excavation as the 'Room of the Stone Vases'.

These relics had been precipitated below by the collapse of the floor of the little chamber above, and we may safely assume that it had served as

[1] *B. M. Excavations in Cyprus*, p. 73, Fig. 127, and cf. A. E., *Myc. Tree and Pillar Cult*, p. 14 (111), Fig. 6.

[2] See above, p. 527 seqq.

[3] See above, p. 386, and p. 389, Fig. 223.

[4] See above, p. 387.

[5] See p. 718 above.

FIG. 537. RITUAL STONE VESSELS FROM TREASURY OF SANCTUARY HALL. (*c.* $\frac{1}{6}$)

a Treasury for sacred vessels in connexion with rites performed in the 'Tri-columnar Hall' into which it opened. We have here, in fact, a conspicuous instance of an upper columnar sanctuary set above a pillar crypt of the basement below.

Ritual Stone Vessels from Treasury of Central Sanctuary Hall.

Remains of numerous 'rhytons'.

The ritual character of this deposit is sufficiently indicated by the fact that, out of fifteen of the best preserved specimens contained in it and grouped together in Fig. 537, eight represent 'rhytons' or libation vessels, and to these must be added the lion's head 'rhyton' illustrated below.[1] Of the comparative place occupied by these in the evolution of this class of vessel, the elongated pear-shaped types illustrated by Fig. 537, A, of a dark, brilliantly veined breccia and the fluted white 'marble'[2] vase, B, supply good evidence. Compared with the original 'ostrich-egg' form of 'rhyton' these specimens, together with the fluted 'marble' examples, C and D, belong to what may be called the third phase of development (see above, 'Comparative Table', p. 225). B, especially with the moulded ring round the neck, shows a close parallelism with a 'rhyton' from Pseira, adorned with painted designs and fish and conventionalized rock-work[3] in the mature L. M. I *b* style, and to be dated, therefore, from the first half of the fifteenth century B. C. C shows the separate neck of a steatite specimen probably of the same type. The elongated conical example, in native alabaster, O, belongs to the same class as the silver vessel held by the Cup-bearer, but may be somewhat later in date. In the Comparative Table of 'rhytons' of this class (Suppl. Pl. XXIV, 12) this is provisionally set down as L. M. II.

Fluted vessels.

The fluting seen in B, with its beautiful reduplicated curves above, is really taken over from the rosette-relief bands of the Third Middle Minoan Period: in another way, the 'blossom bowls' of the Late Minoan Age are a survival of the same tradition. A very fine black and white 'marble' example of this, shown in Fig. 537, F, further completed in Fig. 538, belongs to a vessel of curious form—resembling the expanding mouth of a large jug, the back of which curves inwards.

Marble vessel in form of triton shell.

The ritual vessel (Fig. 537, H), of white marble-like limestone, is in the form of a triton shell, the sacrificial usage of which as a trumpet has already received illustration.[4] Drawings of it by Monsieur Gilliéron, père, are

[1] See below, p. 830, Figs. 544, 545.

[2] 'Marble' is here used to give the best idea of what seems to have been really a very fine-grained limestone.

[3] See Comparative Table, p. 225, Fig. 129, 15. The Knossian 'rhyton', Fig. 537, B, is there set beside it in No. 17. Fig. 537, A, is shown in No. 18.

[4] *P. of M.*, i, pp. 221, 222, and Figs. 167, 168. A triton shell was found in what appears

reproduced in Fig. 539, A, B, where A shows clearly the borings along the rim of the mouth evidently for the attachment of a metal plate. The Minoan copy of a Dolium shell exquisitely cut out of the form of volcanic glass known as liparite, which was found by the Italian Mission at Hagia Triada,[1] and belongs to the transitional M. M. III *b*–L. M. I *a* epoch must, however, be regarded as a greater *tour de force*. An illustration of it as restored is here given in Suppl. Pl. XXXI, *b*.

FIG. 538. MOUTH OF FLUTED VESSEL OF BLACK AND WHITE 'MARBLE' WITH INCURVED BACK FROM 'TREASURY DEPOSIT'.

The globular *alabastron*, K, is a Middle

to have been a small shrine near the 'Magazine of the Lily Vases' (*op. cit.*, p. 581, and see p. 575, Fig. 419).

[1] See A. Mosso, *Le Origini della Civiltà mediterranea*, p. 287, Fig. 181.

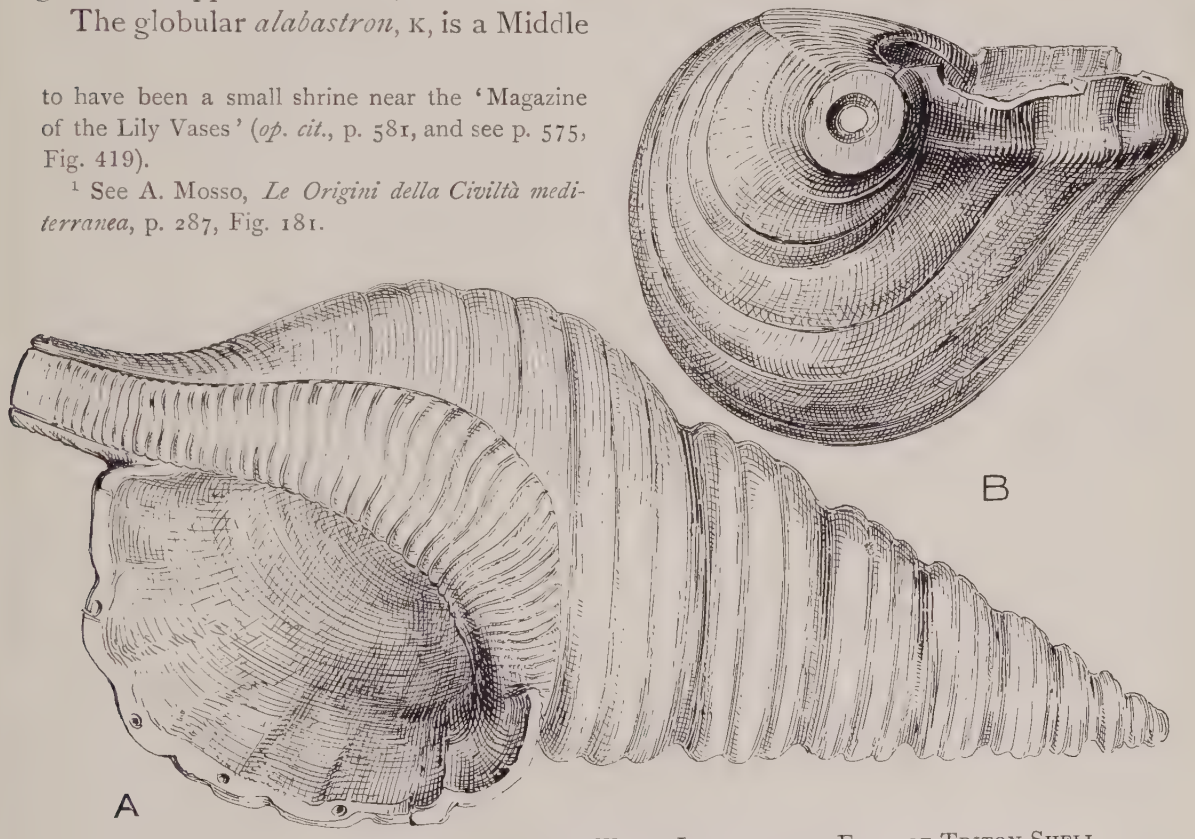


FIG. 539. RITUAL VESSEL OF MARBLE-LIKE WHITE LIMESTONE IN FORM OF TRITON SHELL, SHOWING BORINGS FOR ATTACHMENT OF METAL LIP.

Globular *alabastron* Egyptian import.

Empire Egyptian form, of which the prototype, an ostrich egg with a grey marble mouthpiece added, has been illustrated in the Comparative Table, Fig. 129, 2, p. 225, above, as supplying the prototype of a whole family of Minoan 'rhytons'. The African vogue of simple versions of the same type is still maintained, as we have seen,[1] to this day in the Central Soudan. It seems best to regard this vessel as an Egyptian importation, perhaps handed on to the later Palace from an earlier Treasury.

Spouted vase of faïence.

Together with the stone vessels in this deposit there was also discovered the greater part of a very beautiful faïence vase with a spout and three handles, though only the stumps of these had been preserved. The pedestal was also broken off (see Fig. 540). It was of a pale bluish-green tint, the roll round the upper part of the pedestal being of a lilac colour. In paste and colouring the faïence was indistinguishable from the Palace fabric, as seen in the 'Temple Repositories', and the embossed disks round the upper part of the body also suggested a M. M. III tradition.

Fig. 540. Spouted Vessel of Bluish Green Faïence from 'Treasury Deposit'.

Spouted vessels, apparently influenced by Egyptian copper models, were in vogue in Crete in the last Early Minoan Period and the earlier phase of

[1] See above, p. 223, and Fig 128.

M. M. I. The influence of the Egyptian spouted libation vase (*gebeh*) on a Minoan hieroglyph [1]—a handle there being added, *more Cretico* has also to be borne in mind. Such types of vessel had, however, practically disappeared in Crete during the Middle Minoan Age, while on the other hand it is clear that throughout a large part of Anatolia and North Syria they were abundantly produced. Considering the intimate relations with the Syrian coast from the beginning of the 'Age of Palaces' onwards, we are quite entitled to

a *b*

FIG. 541. *a*, SILVER TEAPOT-LIKE VESSEL FROM BYBLOS TOMB; *b*, FAÏENCE VESSEL FROM 'TREASURY', RESTORED.

seek the prototype of the vessel before us from that side. That the faïence example was derived—as so many vessels in that material—from an original in metal-work is suggested by its whole character. A very near parallel to it in its restored shape, Fig. 541, *a*, is presented by the teapot-like silver vessel found in the chamber tomb at Byblos, together with two gold-mounted obsidian perfume pots engraved with the cartouche of Amenemhat III.[2] A silver bowl with repoussé spiraliform decoration found in the same deposit may fairly be regarded as a Cretan import,[3] and, possibly, a bronze *oenochoê*.[4] Compared with silver vessel from Byblos.

The identity of material and resemblances in the fabric led Monsieur Pottier[5] to attribute the spouted vessel, like the silver bowl, to a Minoan

[1] *Scripta Minoa*, i, p. 197, No. 40 (where, however, the faïence vase from Knossos is erroneously referred to as 'found in the Room of the Throne').

[2] See above, p. 654 and n. 2, and p. 655, and cf. Ch. Virolleaud, *Syria*, iii.

[3] See above, p. 655, Fig. 420.

[4] See above, p. 656, Fig. 421.

[5] *Observations sur quelques objets trouvés dans le Sarcophage de Byblos* (*Syria*, iii, p. 298 seqq.).

Of Syrian derivation.

source. The evidence of the interpenetration of Aegean and Syrian Art is clear, but in the case of the teapot-like vases it must be observed that while about the date to which it belongs these spouted types of vessel were unknown in Crete, so far as existing evidence goes, they are specially characteristic of a widespread family of clay vessels common in North Syria and Anatolia. The comparison of the Knossian faïence specimen, as restored (Fig. 541, *b*), with the Byblos vase given in Fig. 541, *a*, betrays too much resemblance in its general form [1] not to suggest a direct relationship. It was patently derived from a metal prototype, moreover, which would enable us to bridge over the gap between the close of M. M. III *b*, to which the faïence specimen probably belongs, and the M. M. II phase contemporary with Amenemhat III.

[1] The small upright handles at the sides, coupled with that at the back, may be taken to represent an assimilation to the arrangement found on the hole-mouthed bridge-spouted vases so common in Crete throughout the Middle Minoan Age.

Fig. 541, *bis*. Gold Lion's Head 'Rhyton', Fourth Shaft Grave, Mycenae. (See below, pp. 829–31.)

§ 67. Lion's Head 'Rhytons' of Minoan Rhea—Duplicate from under Delphic Shrine; The Minoan *Cithara* and Knossian Element in Cult of Apollo Delphinios.

Lion's head 'rhyton' of alabaster from Treasury of Sanctuary; Prototypes in metal-work; Marble specimen in form of lioness's head; Evidence of inlays; Such vessels appropriate to Minoan Rhea; Lion-guarded Goddess on seals and male Consort; Part of Lioness's head 'rhyton' of Knossian fabric and material found beneath Apollo temple at Delphi; Minoan affinities of Delphic cult—votive Double Axes; The cithara *in Crete and Delphi; Early types of lyre on hieroglyphic seals; Fresco designs showing* kitharoedos *at H. Triada; Egyptian features in the instruments; Prototypes, Asiatic; Kinyras and the* kinnor; *His association with Aphrodite at Paphos—baetylic images of both, also regarded as tomb-stones; 'Tomb of Zeus' at Knossos compared—mourning scene on ring;* omphalos *form compared with stalagmitic bosses—that in Eileithyia's Cave near Knossos;* omphalos-*like object wound round with bands on Knossian fresco—Delphic* omphalos *compared; Cretan religious foundation at Delphi described by Homeric Hymn; Youthful archer as Consort of Minoan Goddess—Artemis Diktynna or Britomartis—Apollo Delphinios associated with her in Crete; The temple of Apollo Delphinios at Knossos—central sanctuary of the Island.*

Among all the objects found in this deposit the greatest religious interest attaches to the remains of two 'rhytons' in the form of lion's and lioness's heads. The former was executed in native alabaster, the latter in the marble-like limestone already referred to, and fragments of others occurred in the same material. The head of the lioness is already known; that of a lion, clearly showing the pointed *barbiche* beneath the chin, restored from fragments presented to the Ashmolean Museum, is illustrated for the first time in Figs. 544, 545, p. 830, below, in connexion with the profile of a similar head on a Knossian clay sealing. It is closely compared with the lion's head 'rhyton' of gold found in the Fourth Shaft Grave at Mycenae (see Fig. 541, *bis*) which itself is clearly of M. M. III fabric,[1] and the dependence on

Lion's head 'rhytons' from treasury of sanctuary hall.

[1] See also above, p. 420, Fig. 243, and cf. Prof. G. Karo, *Minoische Rhyta* (*Jahrb. d. d.* *Arch. Inst.*, xxvi (1911), pp. 253, 254, and Pl. 19).

a

b

FIG. 542. 'RHYTON' IN FORM OF LIONESS'S HEAD: FROM CENTRAL TREASURY. (See too Suppl. Pl. XXXI, *a*.)

a metal original is indeed in this case so close that it might almost have been copied from the Shaft Grave specimen. The sealing—which also affords such a good profile comparison with the latter object—is itself of M. M. III date, but there is every reason to suppose that the copy in stonework is Late Minoan.

Marble 'rhyton' in form of lioness's head.

The 'rhyton' in the form of the lioness's head is shown in Fig. 542 as slightly restored (see, too, Suppl. Pl. XXXI, *a* [1]). This, though of harder material, and more schematically moulded, is clearly a work of the same

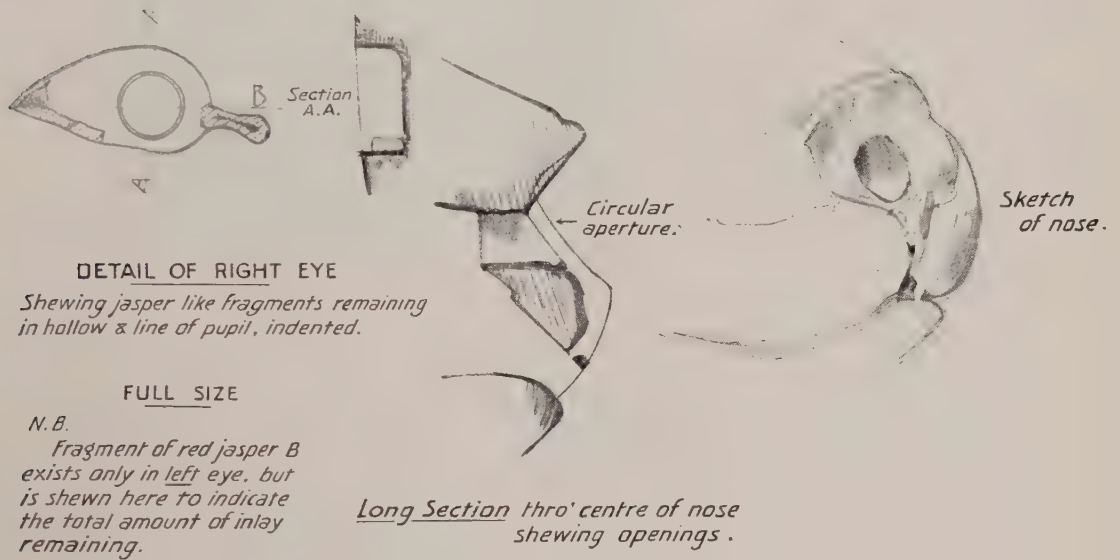

B
Section A.A.
Circular aperture.
Sketch of nose.
DETAIL OF RIGHT EYE
Shewing jasper like fragments remaining in hollow & line of pupil, indented.
FULL SIZE
N.B.
Fragment of red jasper B exists only in left eye, but is shewn here to indicate the total amount of inlay remaining.
Long Section thro' centre of nose shewing openings.

Fig. 543. Sections of Lioness's Head 'Rhyton': by Theodore Fyfe.

Knossian school as the inlaid bull's head of steatite illustrated above.[2] Like the other it has a larger round opening (2·7 cm. in diameter) in the upper part of the neck, and a smaller one (diam. 0·9 cm.) in the lower lip. Its back plate is wanting, though holes for the rivets by which it was attached are visible round the outer borders of the neck, with some traces of a band in connexion with them, so that it was probably of metal. There was here, too, a similar system of inlays. A piece of the red jasper was found still attached to the nozzle, and this inlaying material had been secured by a projecting cylinder that had run right through the wall of the vessel (see section, Fig. 543). A rim of the same material had fringed the eye-socket, as in the case of the bull's head, and an incised circle in the flat

Inlay work.

[1] From a drawing by Monsieur Gilliéron, père.

[2] See above, pp. 528, 529.

surface within shows that here too there was a separate inlay for the pupil of the eye, in this case also perhaps a crystal lens overlaid with a vermilion pigment on its incave lower surface which thus magnified the fiery glare.

Type derived from metal-work.

The snout of this 'rhyton' and sections of the nostril and details of the eye are given in Fig. 543 from drawings by Mr. Theodore Fyfe. There can be no doubt that, as in the case of the fellow vessel in the shape of a lion's head (Figs. 544, 545), this too closely depends on an earlier type in precious metal, such as the gold example in a 'heraldic' style found in the Mycenae grave (Fig. 541, *bis*).[1] Reminiscences of such a prototype in metal-work are traceable in the prolongation

FIG. 544. ALABASTER 'RHYTON' IN FORM OF LION'S HEAD: FROM CENTRAL TREASURY, RESTORED. FACING VIEW.

FIG. 545. ALABASTER 'RHYTON' IN FORM OF LION'S HEAD: FROM CENTRAL TREASURY, RESTORED. PROFILE VIEW, SHOWING *BARBICHE*.

[1] See Dr. Karo's remarks, *op. cit.*, pp. 253, 254, and cf. J. de Mot, *Rev. Arch.*, 1904, 2, p. 214, and my own remarks, *Archaeologia*, lxv (1914), pp. 85, 86.

of the inner corners of the eyes at the opening of the lachrymal gland, the rendering of the hairs along the jaws, the sharp outline of their edge, and the ridge above the eyes. As in the case of the alabaster and gold examples, the two-cupped prominences above the nose are well developed.[1] On the other hand, the little peaked beard or *barbiche* beneath the chin seen in the other examples is here absent.[2]

Notwithstanding, however, these signs of schematic treatment, the execution of this marble head shows a combined firmness of modelling and delicacy of touch that must place it in the first rank among the examples known to us of Minoan stone carving. It conveys, indeed, an underlying sense of beauty, recalling that of certain archaic Greek works.

FIG. 546. GODDESS WEARING PEAKED TIARA AND HOLDING SPEAR, BESIDE LION GUARDIAN. ($\frac{2}{1}$)

FIG. 547. ARMED GOD WITH TIARA AND LIONESS OR PARD. ($\frac{2}{1}$)

FIG. 548. YOUTHFUL GOD WITH TIARA HOLDING BOW; LION BEHIND ($\frac{2}{1}$)

Lion's head 'rhytons' appropriate to Minoan Rhea.

The discovery of these lion's head 'rhytons' in the Treasury Chamber of the central sanctuary of the Palace has a marked appropriateness. The type of the lion-guarded Goddess, the Minoan Rhea, that appears on a series of clay sealings on the borders of the later Shrine, finds its analogy in the impression of an earlier signet from the Temple Repositories here reproduced. On this the Goddess, marked by her tiara, holding a spear, as in the other case, is seen advancing beside a lion guardian, upon whose hind-quarters she

[1] These conventionalized prominences here derived from Minoan goldsmith's art were taken over into the earliest Greek Art, and are very conspicuous in lion's masks, as seen, for instance, on the fifth-century coin-types of Rhegion.

[2] The absence of this has in some quarters started the quite unfounded idea that the object represented a dog's head. The correspondences in other details with the lion's head 'rhyton' sufficiently show that this was intended for that of a lioness.

Lion-guarded Goddess on seals and male consort.

lays her hand (Fig. 546).[1] On another seal-impression from the same deposit (Fig. 547) a male figure, armed with a spear and shield and wearing a peaked head-piece, appears beside a lioness or pard. That we have in this case a male consort or an actual son of the Goddess is made probable by the figure on a contemporary seal-impression from Hagia Triada (Fig. 548)[2] who stands beside her guardian lion and wears, like her, a peaked tiara. What gives especial interest to this figure is the fact that he is armed with a bow, apparently of the horned type. It looks indeed as if in certain aspects the Minoan Rhea had approached Leto, the mother of the 'far-shooting' archer God.

On an electrum ring from Mycenae, we see what seems to be, again, the Cretan Mother Goddess seated on a throne and approached by a youthful figure holding a spear in one hand and crossing her wrist with his own, the forefinger and thumb being apparently in both cases pressed together in a familiar gesture of agreement.[3] On the gold ring from Knossos already illustrated,[4] where a female figure, in whom we may also possibly recognize the Goddess, brings down by her incantations a smaller male figure armed with a spear before a baetylic obelisk, and on the large signet-ring from Mycenae,[5] showing the Goddess and her handmaidens, a descending warrior God also makes his appearance, holding spear and shield. The Double-Axe symbol and the lions' heads in the field here proclaim identity with the Palace cult of Knossos.

Part of lioness's head 'rhyton', like Knossian found at Delphi.

Identity in style, details, and materials.

The libation vessels in the form of lion's and lioness's heads from the Treasure Chamber of what was clearly the Central Sanctuary Hall of the Palace fit in thus with the cult of the lion-guarded Goddess, otherwise illustrated by seal-impressions found in this area, whose religious attributes are occasionally reflected by a male consort also attended by lions. But by far the most interesting connexion of the forms of Minoan worship here illustrated has been the discovery by the French excavators at Delphi—where very ancient Cretan relations are already illustrated by the Homeric Hymn to Apollo—of part of a lioness's head 'rhyton' identical in material and fabric with the Knossian specimen, Fig. 542, above.

[1] Reproduced from *P. of M.*, i, p. 505, Fig. 363, *a*. For an almost exact replica from Zakro, and contemporary fabric, see *B. S. A.*, xvii, p. 265, Fig. 2. In other cases we see the Goddess with lion supporters in place of her baetylic column. (See my *Myc. Tree and Pillar Cult*, p. 66, Fig. 44, and p. 67, Fig. 45, where she is seated on a lion's head.) At times her male consort takes the same place (*op. cit.*, p. 65, Fig. 43).

[2] Cf. *op. cit.*, p. 505, Fig. 363, *c*.

[3] Found by Tsountas in a tomb of the Lower Town (see Tsountas and Manatt, *Mycenaean Age*, p. 51, and A. E., *Myc. Tree and Pillar Cult*, pp. 77, 78, and Fig. 51). See, too, Furtwängler, *Ant. Gemmen*, iii, p. 36, Fig. 14.

[4] *P. of M.*, i, p. 160, Fig. 115.

[5] See above, p. 341, Fig. 194, *e*.

This object, of which a reproduction is given in Fig. 549, was actually found under the mystic ἄδυτον of the Pythian Temple.[1] It is of the same marble-like white limestone as the Knossian example, with a slight yellowish tint, and presenting, like it, an admirably polished surface. Only the fore-part of the head has been here preserved, with the lips and mouth, about a third less in scale than the other, but both in style and in all the details, such as the aperture in the mouth and the hollowing of the nose for the insertion of an inlay, the fabric is identical with that from the sanctuary at Knossos, and must, indeed, have been executed in the same Knossian workshop. One interesting point, however, is observable in the upper part of the nose, where a fracture had occurred that has been repaired by means of bore-holes of which the traces remain. This itself may be taken as an indication that on the Mainland site such a work of art could hardly have been reproduced. Had such a breakage befallen it at Knossos itself the 'rhyton' would certainly have been thrown away and another made to replace it.

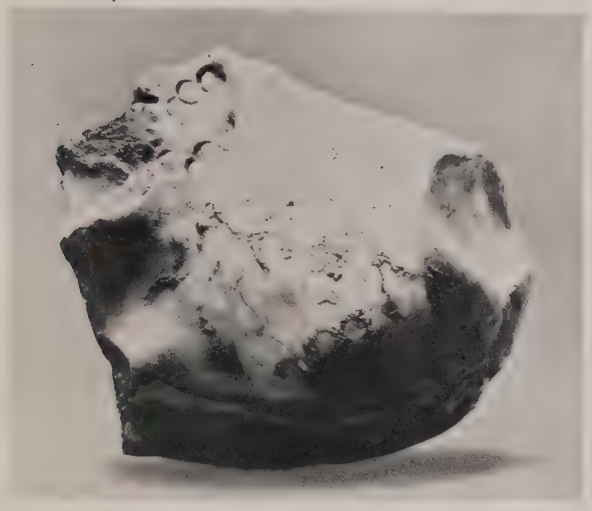


FIG. 549. SNOUT OF LIONESS'S HEAD 'RHYTON' OF MARBLE-LIKE LIMESTONE FROM BENEATH SANCTUARY OF APOLLO AT DELPHI.

Part of the rim of an ordinary stone 'rhyton' of elongated conical shape was also found at Delphi.[2] To these evidences of a connexion between the site of the Delphic sanctuary and Minoan Crete going back to the approximate date of 1500 B. C. must be added, moreover, the proofs of some remarkable correspondences in the later Cult.

Minoan affinities in Delphic cult.

A discovery at Delphi—this of Classical date—once more brings the religion of the spot into close relation with the central cult at Knossos. Beneath the Pythian Temple, and on the borders of the altar, was found

Votive double axes found in Delphic sanctuary.

[1] P. Perdrizet, *Fouilles de Delphes*, v, p. 3 (Fig. 13), and see G. Karo, *Minoische Rhyta* (*Jahrb. d. d. Arch. Inst.*, xxvi, 1911, pp. 254, 255, and p. 256, Fig. 7). Cf. J. de Mot, *Rev. Arch.*, 1904, pp. 214, 215.

[2] Perdrizet, *Fouilles de Delphes*, v, 208, No. 698; *Phot. de Inst.*, Delphi, 132.

a series of miniature bronze double axes of the votive type, perpetuating the usage in vogue in the holy places of the Minoan Goddess.

Fig. 550. Hieroglyphic 'Lyre' Signs. *a*, *b*, incised on Seals; *c*, *d*, *Graffiti* on Clay Documents: Knossos.

The seven-stringed lyre or *cithara*, the special instrument of Apollo, is also Minoan. It was played in ritual invocations of the Lady of the Double Axes long before the Cretan ministrants from Knossos chanted to its strains the hymn of victory in honour of the Delphic God.[1]

Attention has already been called in this work to the use of this instrument in the sacrificial scene on the painted sarcophagus from Hagia Triada, where the objects of worship were the sacred Double Axes of the Goddess, whose indwelling presence was marked by the perched birds. This is supplemented by another similar fragment, itself from the site of the 'Little Palace' there, in which some details of the instrument are more clearly defined (see below, Fig. 552, *b*). It may, indeed, be truly said (in a more literal sense than might be suspected) that the long-robed priests—like those of the 'Procession Fresco'—who here play the Minoan *cithara*, were the true forerunners of Apollo *kitharoedos*.

The *cithara* in Crete and Delphi.

Fig. 551. Clay Impression of 'Signet' Seal; Hieroglyphic Deposit, Knossos (enlarged).

The *cithara* already appears at Knossos as a hieroglyphic sign on a seal-impression and clay documents from the Palace deposit, Fig. 550, *a*, *d*, and, again, on a bead-seal from the Candia district, Fig. 550, *b*.[2] The cursive versions of the sign, as seen in Fig. 550, *c*, *d*, present only three chords, but too much importance must not be attached to these secondary forms.[3] That the instrument originally had only four is made probable by the appearance, at an epoch equivalent to E. M. III, of male figurines of marble

[1] The *cithara*,—good for marking rhythm,—was specially adapted for dactylic chants like the Hymn of Apollo (see A. and M. Croiset, *Hist. de la littérature grecque* (2nd ed.), p. 67). Pausanias (10. 7) relates that Hesiod was forbidden to take part in the hymn-singing contest at Delphi because he had not learned to accompany himself on the *cithara*.

[2] Cf. A. E., *Scripta Minoa*, i, p. 192, No. 29.

[3] A derivative type also appears in the Linear Class A (*P. of M.*, i, p. 642, Fig. 476, No. 78).

of Cycladic fabric, holding a kind of triangular four-stringed harp or *trigonon*.[1] In the developed form of the Cretan lyre the number of the strings was doubled, since we find eight or seven. The seven-stringed lyre—which Terpander had the credit of having substituted for the tetrachord—is indeed the true double of that with four strings, since, among the Greeks, tetrachords succeeding one another had a tone in common.[2]

The careful design, here reproduced in Fig. 551, is taken from a clay impression of a 'signet seal' from the Palace hoard,[3] where it occurs, apparently in company with another stringed instrument, within a border, the decoration of which seems to be derived from a repetition of the lion's mask sign. It shows eight strings, as in the earliest known Semitic *cithara*,[4] and this number is repeated (Fig. 550, *b*) on a more recently discovered four-sided bead-seal of green steatite from the Candia district, one face of which is occupied by four facing lion's heads—once more, a significant association.[5] The horned projection of the upper framework in this specimen recurs in the *graffito* sign, Fig. 550, *c*, and it is noteworthy that the bar to which the strings are attached is distinctly separated from the base of the instrument.

Early types on hieroglyphic seals.

This feature characterizes certain later Egyptian representations of lyres in a more pronounced degree, and a trace of a curving cross-line—farther up above the base of the instrument but analogous to the seal-type—is visible in the design on the Hagia Triada sarcophagus, Fig. 552, *a*. This particularity is also restored in Fig. 552, *b*. It will be seen, indeed, that, though the ultimate origin of the *cithara* in Crete must be sought elsewhere, these designs were taken over from a more or less contemporary Egyptian source such as is supplied by the Theban example, Fig. 553.[6] This Egyptian

Fresco types of *kitharoedos* at H. Triada.

[1] U. Koehler, *Praehistorisches von den griechischen Inseln* (*Ath. Mitth.*, ix, p. 156 seqq. and Pl. VI). One was from Keros near Amorgos, the other from Thera.

[2] Gevaert, *Hist. et théorie de la musique dans l'Antiquité*, i, p. 87. See, too, L. Paribeni, *Mon. Ant.*, xix, p. 38.

[3] See *P. of M.*, i, p. 276, Fig. 205. The two-horned sign below the 'lyre' on this impression may also represent an instrument, since the six cord-like lines here seen recur on another signet (*Scripta Minoa*, i, p. 192, No. 30 *f*, P. 30, d). With its 'stand' below it recalls a Late Mycenaean type of 'lyre' found at Menidi, and since restored in the Athens Museum. The sign as a rule, however, shows no trace of strings.

[4] See below, Fig. 554.

[5] The 'lyre' sign is here followed by the 'ox-head' (No. 61, *op. cit.*, p. 206) and the 'mallet' (No. 24). On the following side are two groups, the 'trowel' (No. 18) and 'human eye' (No. 5), and the 'trowel' and 'arrow' (No. 13). On the two other faces are (1) a dove and crouched wild goat; (2) the four lions' heads. This bead-seal was obtained by me by exchange from Mr. Richard Seager. One side of it showing the lyre has been accidentally inserted among those of another seal in *P. of M.*, i, p. 277, Fig. 207, where it appears as *c* 3.

[6] Wilkinson, *Ancient Egyptians* (ed. Birch), i, p. 477, Fig. 243.

Egyptian features in the instruments.

design explains certain well-marked and hitherto misunderstood features presented by the painted stucco fragment from the little Palace at Hagia Triada, restored in Fig. 552, *b*. The Egyptianizing sprays, here symmetrically set as ornaments on the upper cross-piece of the instrument, were obviously suggested by the lotus flowers, drawn as if rising from behind the heads of

a *b*

FIG. 552. *a*, MALE LYRE-PLAYER: H. TRIADA SARCOPHAGUS; *b*, MALE LYRE-PLAYER FROM PALACE, H. TRIADA.

FIG. 553. FEMALE LYRE-PLAYER, THEBES, EGYPT.

the players and dancers, in some Egyptian wall-painting like that from which Fig. 553 is taken, and have nothing to do with the lyre. On the other hand, the animals' heads with pointed ears, clearly shown on either side of the *cithara* in Fig. 552, *b*, are simply copied from the gazelles' heads of an Egyptian example like Fig. 553, without the curving horns. In view of this comparison, it is clear that we have neither to do with serpents, nor, as has been ingeniously suggested, with the 'whistling swan' (*Cygnus musicus*)[1]—however tempting this would be in connexion with a citharoedic figure.

[1] Dr. Paribeni, in his excellent account of the Hagia Triada designs (*op. cit.*, p. 37, n. 2), inclined to see swan's heads and necks. But the pointed ears are clearly visible in Fig. 552, *b*. The swan's or, rather, duck's head certainly occurs on a 'trigon' at Thebes (Wilkinson, *Ancient Egyptians*, i, p. 469, Fig. 235) and is, of course, a very ancient decorative finish of

Though the indebtedness to Egyptian models is in these cases undoubted, it must always be borne in mind that the lyre itself is in Egypt itself an exotic instrument. While the harp—evolved from the 'plain' bow—comes down from the earliest dynasties, and was no doubt a still earlier Nilotic heritage, the lyre or *cithara* only makes its appearance in the days of the Twelfth Dynasty and in an Asiatic connexion. On the walls of Tomb 3 at Beni Hasan,[1] of the time of Usertesen II—*c.* 1900 B.C.[2]—a Bedouin (Aamu) is seen playing an 8-stringed lyre of the solid-based Oriental kind with the aid of a *plectrum* (Fig. 554). The instrument was at home in the East, and a relief found at Lagash (Tello), showing one with a heavy frame rather recalling a loom, goes back at least to the middle of the fourth millennium B.C. Since no Egyptian lyres are known till the Eighteenth Dynasty, it is clear that the Cretan instrument, copied in M.M. II as a sign of the hieroglyphic script, must have been borne from Syria or some intermediate region, however much later types may have been influenced by Egyptian versions of the instrument.

Prototypes Asiatic.

FIG. 554. BEDOUIN (AAMU) PLAYING 8-STRINGED LYRE. TOMB 3, BENI HASAN (*c.* 1900 B.C.).

The Semitic lyre was known as the *kinnor*, of which Jubal was 'the father',[3] though in the later Hebrew writings the loan-word *kitharis*[4] also makes its appearance, illustrating its equivalence. In the Greek version the *kinnor* is represented either by κινύρα or κιθάρα, the former being inseparable from the name of Kinyras, the Priest-King of Paphos, the chief minister of the Goddess, who as singer and musician made good his name. Loved of Aphrodite, he was a kind of double of Adonis, and his

Kinyras and the *kinnor*.

Nilotic works. But the 'whistling swan' or 'whooper' is essentially an Arctic species and is a rare Mediterranean visitor.

[1] *Archaeological Survey of Egypt* (E.E.F.), Beni Hasan, pt. i; P. E. Newberry, Pl. XXXI; this version is taken from a drawing by Robert Hay (1828). See, too, Wilkinson (ed. Birch), i, Pl. XII; Lepsius, *Denkmäler* (Abth. ii), and cf. Rosellini, Champollion, &c.

[2] The last record in the tomb is of Usertesen II's 6th year.

[3] Gen. iv. 21: *kinnor* here is wrongly translated 'harp' in the English version.

[4] קיתרס Dan. iii. 5 (cf. I. D. Prince, Art. *Music*, *Encycl. Bibl.*).

cult was spread not only through Cyprus but over Cilicia and North Syria. As a seer and culture-hero, beautiful, and master of the lyre, he naturally appeared to the Greeks (who brought him into actual comradeship with Apollo) as a double of the *Kitharoedos*.

His association with Aphrodite at Paphos.

Nor was it only Aphrodite who had an *omphalos* tomb in the sacred enclosure of Paphos.[1] Kinyras, her youthful consort, had a tomb beside her, doubtless of the same 'baetylic' class.[2] In a similar way at Delphi the *omphalos* was regarded as the 'tomb of Dionysos', and the grave of his favourite and double Hyakinthos lay beneath the sanctuary of the Amyklaean Apollo.

Baetylic images of both, also regarded as tombstones.

The Paphian Aphrodite and her Syrian sisters such as the Astarte of Byblos, as we know them by later remains and traditions, show a strong religious affinity with the Minoan Goddess.[3] Not only, moreover, is she too herself associated with obelisks and pillars, but there are traces of a youthful male consort with a similar baetylic equivalent. Here, too, as at Amyklae, Delphi, and elsewhere, the earlier aniconic cult image is explained by later tradition as the gravestone of a divine or semi-divine personage. At Knossos it is the tomb of the 'Cretan Zeus'.

'Tomb of Zeus' at Knossos compared.

The earliest important find on the site of Knossos was indeed the gold signet-ring showing a small figure of an armed male god descending on an obelisk before the entrance of a sanctuary and sacred grove wherein stands a baetylic pillar.[4] From the design, moreover, on a signet from Mycenae, depicting what seems to be a mourning scene over a gravestone of diminutive proportions with a small shield beside it,[5] it looks as if the idea of the Boy-God's sepulture had already been evolved.

Mourning scene on ring.

Omphalos form compared with stalagmitic bosses.

The *omphalos* form itself curiously resembles the low stalagmitic pillars or bosses of natural formation often seen rising from the floors of caves, and such physical formations are still in all countries connected with supernatural powers, now reduced mostly to a lower grade like that of

[1] Max. Tyr. Diss. viii. 8: Παφίοις μὲν ἡ Ἀφροδίτη τὰς τιμὰς ἔχει τὸ δὲ ἄγαλμα οὐκ ἂν εἰκάσαις ἄλλῳ τῷ ἢ πυραμίδι λευκῇ. Serv. ad Aen. I. 714: 'Apud Cyprios Venus in modum umbilici, vel, ut quidam volunt, metae colitur.' See on this Alex. Enmann, *Kypros und der Ursprung des Aphroditekultus*, pp. 49, 50.

[2] Ptolemy, son of Agesandros, who seems to be identical with a Governor of Cyprus of that name (quoted by Clem. Alex. (*Protr.*, p. 40)), mentions that Kinyras and his descendants were buried in the Temple at Paphos. Enmann, *op. cit.*, p. 33, recalls the holy grave of Hyakinthos, the double of the Amyklaean Apollo, in his sanctuary.

[3] On this subject I need only refer to my *Myc. Tree and Pillar Cult*, p. 21 (119) seqq., and *passim*, and *P. of M.*, i, p. 160 seqq.

[4] *Myc. Tree and Pillar Cult*, p. 72, Fig. 48, and *P. of M.*, i, p. 160, Fig. 115.

[5] *Myc. Tree and Pillar Cult*, p. 79 (177), Fig. 53; *P. of M.*, i, p. 161, Fig. 116.

fairies, and djinns. Stalagmitic pillars of this kind are found in the lower subterranean sanctuary of the Cave of Psychro, and it seems quite possible that the inscribed Libation Table found there in the Upper Grot may have been originally set on a natural *omphalos* of this kind.[1] Much nearer Knossos, indeed, in what has been recognized with much probability as the Cave of Eileithyia, mentioned by Homer,[2] the entrance of which was found, below the steep, a little inland of its later port of Amnisos, a still more obvious illustration of this natural evolution of cult has been brought to light, though its full significance seems to have escaped its discoverers.

That in Eileithyia's Cave near Knossos.

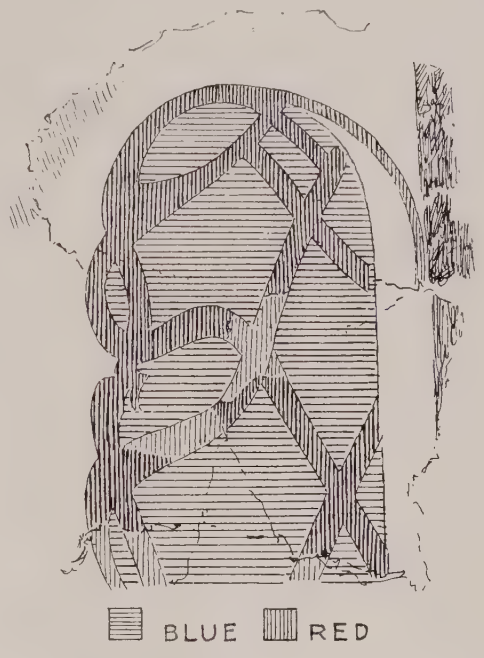


FIG. 555. FRESCO FRAGMENT FROM KNOSSOS, SHOWING *OMPHALOS*-LIKE OBJECT WITH BANDS ROUND.

About the middle of the Cave 'stands like a statue a large stalagmite about $1\frac{1}{2}$ metres high and 1·20 in circumference. Around this stalagmite is built a small enclosure wall made of small stones without cement. Other stalagmites of smaller dimensions are to be found in various parts of the grotto.' The small excavation then undertaken by Dr. Joseph Hatzidakis, the President of the Candia Syllogos, produced 'a number of terra-cotta fragments belonging to vases of diverse epochs from the most ancient down to the Roman'.[3]

[1] I have already made this suggestion in *P. of M.*, i, p. 626. In Fig. 465 it is shown as restored in *omphalos* form with a slightly flattened top on which the projecting disk of the lower surface of the table rested. This restoration is preferable to that with the more slender pillar given in my *Myc. Tree and Pillar Cult*, p. 16, Fig. 7. It is clear that the projecting disk was intended to rest on some support below.

[2] Od. xix. 188

στῆσε δ' (Ὀδυσῆα) ἐν Ἀμνισῷ, ὅθι τε σπέος
Εἰλειθυίης,
ἐν λιμέσιν χαλεποῖσι.

[3] This description is due to Professor F. Halbherr who assisted Dr. Hatzidakis in the excavation (*The Antiquary*, vol. xxviii, p. 112). Dr. Hatzidakis had given an account of the exploration in Παρνασσός, x, 1886–7, p. 339 seqq. The original discoverer of the Cave was Kyrios Anerrapsis of Candia. Dr. Hatzidakis subsequently found Minoan sherds on the steep a little above the Cave (personal communication in D. Fimmen, *Die kretisch-mykenische Kultur* (ed. G. Karo), p. 20).

It was naturally at that date—(1886)—impossible to give a precise account of prehistoric Cretan sherds, but we have here a distinct picture of a natural baetylic *omphalos* surrounded by a small artificial temenos indicating its sanctity. Eileithyia herself, as a form of Artemis and deliverer in child-birth, may well represent one version of the Minoan Mother Goddess.

Omphalos-like object wound round with bands on Knossian fresco.

In this connexion a curious and unexplained painted stucco fragment found near the remains of the 'Cow-boy Fresco' on the East slope of the Palace is at least worthy of illustration (Fig. 555). A pale blue *omphalos*-like prominence, much resembling a stalagmitic growth, is here seen, round which a deep red band seems to have been irregularly wound, one end hanging over from the top. A possible analogy to this is supplied by the winding round of articles of apparel about holy stones and pillars known to modern folk-custom, and a more elegant analogy is to be found in the beaded network that adorned the *omphalos* at Delphi, and is carved upon it in relief in its later marble version (Fig. 556).[1] The parallel does not lose its importance even if we assume that the *omphalos* on the painted stucco fragment referred to a female divinity. Such indeed might best accord with the prehistoric stratum at Delphi itself. Nor can the possibility be ignored that in this and other cases the baetylic cone or pillar was bi-sexual in attributes and could on occasion be possessed either by the male or female aspect of a divine pair.[2]

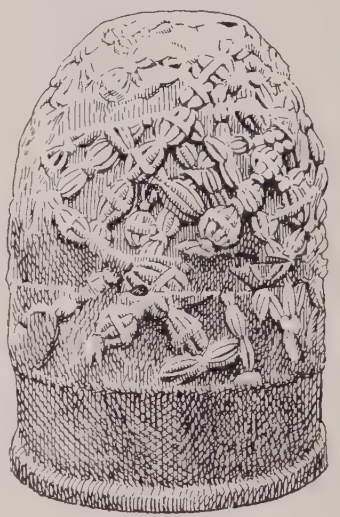


FIG. 556. MARBLE *OMPHALOS* FROM DELPHI WITH BEADED NETWORK.

Delphic *omphalos* compared.

The remarkable discovery beneath the actual *Cella* of the temple at Delphi of part of a lioness's head 'rhyton' of Knossian fabric and material, and unquestionably connected in the central Palace sanctuary with the worship of the Minoan Rhea, certainly throws a new light on the traditions already embodied in the Homeric Hymn connecting Knossos in a special way with the very origin of the Delphic cult.

[1] Found by M. Homolle at the spot indicated by Pausanias (see G. Karo, Dar. et Saglio, *Dict. des Antiquités*: Art. *Omphalos*; and Fig. 5404; and Miss Jane Harrison, *Bull. Corr. Hell.*, 1900, p. 259). The earlier *omphalos* (found under the *adyton* of the later temple) was of *poros* limestone with part of an archaic inscription.

[2] See my observations on such aniconic images in relation to the bi-sexual aspects of early Semitic cults (*Myc. Tree and Pillar Cult*, pp. 53, 54).

Cretan religious foundation at Delphi described by Homeric Hymn.

Not of their own willing,[1] but moved by a divine impulse, the Cretan band set sail from 'Minoan Knossos'—which in the Hymn receives from Apollo the title of 'many tree'd',[2] pointing to the recovery here of the old forest growth. Guided by Apollo in the form of a dolphin, the ship is borne past the Taenaron promontory—where the crew had wished to land—to Crisa—the 'Cretan town'[3] in the 'holy haven' of Delphi. It would appear indeed that one of the Kuretes was credited with the actual discovery of the Mantic Chasm.[4]

'Apollo of the Dolphin', playing on his *cithara* the while, leads the band—stamping the ground with their feet in the manner of the πηδικτὸς χορός still danced by Cretan youths—and singing their native paeans in honour of his victory over the dragon Pytho[5]—itself, we may believe, the reflection of that which Ra had gained over the serpent Apef.[6]

All this, and the setting up of an altar to Apollo Delphinios on the Delphian shore by his Cretan worshippers, does not of course affect the question of his original divine personality, whether it is to be regarded as European or Anatolian. But it may certainly be taken to indicate that his was not the earliest cult at Delphi and that certain aspects of it were taken over from a Minoan religious foundation that had preceded it on the spot—derived—as so much converging evidence tends to show—from Minoan Knossos. It is quite possible, of course, that this very early connexion may have been renewed by some religious implantation from Crete of a later date, due to the abiding connexion attested at Knossos by the cult of Apollo Delphinios.

Youthful archer as consort of Minoan Goddess.

Towards adjusting the strongly developed male side of the indigenous Greek divinity with the Minoan religion, in which the Goddess occupied such a dominant position, certain aspects of the Cretan worship were no doubt of great assistance. The Minoan Goddess, as we have seen, was often asso-

[1] Οὐκ ἐθέλοντας.

[2] Apollo thus addresses the Cretans on their arrival (*Hymn to Apollo*, l. 475):

ξεῖνοι, τοὶ Κνωσὸν πολυδένδρεον ἀμφινέμεσθε.

[3] Κρῖσα understood by the Greeks to be equivalent to Κρῆσσα. Cf. L. Preller, *Ausgewählte Aufsätze* (ed. Koehler), *Delphica*, p. 227.

[4] The shepherd Κορήτας, Plutarch, *De defectu orac.* 42 and 46; cf. Preller, *op. cit.*, p. 229.

[5] *Hymn to Apollo*, l. 516 seqq.:

Οἱ δὲ ῥήσσοντες ἔποντο
Κρῆτες πρὸς Πυθὼ καὶ ἰηπαιήον' ἄειδον,
Οἷοί τε Κρητῶν παιήονες, οἵσί τε Μοῦσα
ἐν στήθεσσιν ἔθηκε θεὰ μελίγηρυν ἀοιδήν.

In the L. M. III terra-cotta group from Palaikastro we see a female lyre player—at first taken for the Snake Goddess—and a ring dance in which women only take part (*B.S.A.*, Suppl.i, p. 88, Fig. 71, &c.).

[6] The influence of Egyptian religion on that of prehistoric Crete, of which so many indications have been given in this book, makes it by no means improbable that the story of Horus and the serpent Apophis may have been already commemorated in Minoan hymns.

ciated with a male consort who may from time to time be interpreted as standing either in a marital or a filial relation, and who in some cases appears as an adult warrior and in others as a young boy. It is particularly significant, moreover, as noted above, when we find this male consort—who wears the same tiara as the Goddess to mark his divinity—holding a bow as, on occasion, the Goddess herself, and with the same lion guardian.

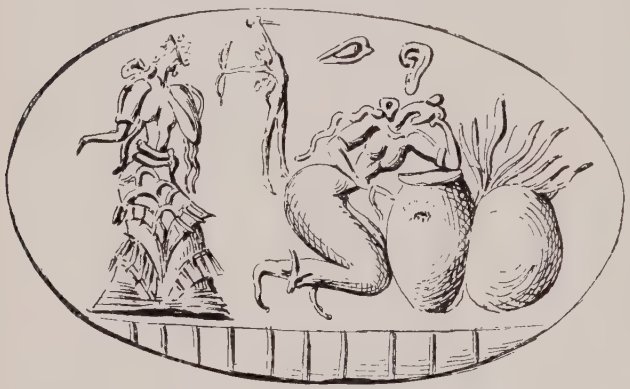


FIG. 557. GOLD SIGNET-RING IN THE ASHMOLEAN MUSEUM SHOWING BOY-GOD HOLDING BOW. $(\frac{3}{1})$

FIG. 558. GOLD BEAD-SEAL FROM THISBÊ. $(\frac{3}{1})$

Signet-type.

On an interesting gold signet-ring, in the Ashmolean Museum,[1] Fig. 557, what seems to be a Boy-God brandishing a bow in one hand and with the other arm, raised above his head, holding a round-pommelled dirk,[2] descends with flowing locks, apparently in response to the vehement gesticulation of a richly dressed female figure[3] in whom we may venture to recognize the Mother Goddess. In the field are the eye and ear symbols,[4] which certainly have a divine significance, but the meaning of the more plainly attired female to the right, leaning over a jar with a tree and a rock—or possibly another jar—behind, is not easy to explain.

Artemis Diktynna or Britomartis, the Huntress.

In her character of the huntress—so well illustrated by the Thisbê signet, Fig 558[5]—the great indigenous Goddess survived, as is well known, in the Island under her traditional Eteocretan name of Diktynna or Britomartis[6] who was naturally identified with Artemis by the Greek colonists. One of

[1] Given by Mr. E. P. Warren, said to be from the Vapheio Tomb.

[2] This interpretation of the object, the result of the microscopic examination, is corroborated by Monsieur Gilliéron.

[3] The 'scale' pattern on the upper part of her skirt recalls that of more than one Minoan dress pattern.

[4] The object in front of the dove on the votive plate from Psychro (*P. of M.*, i, p. 632, Fig. 470) seems also to be an ear.

[5] See A. E., *Ring of Nestor, &c.*, pp. 21, 22; Fig. 24.

[6] Translated the 'Sweet Virgin' (Solinus, x, 8 Britomarten quod sermone nostro sonat virginem dulcem; Hesych., βριτύ. γλυκύς Κρῆτες.

her attributes, which it is well to bear in mind in relation to those of the Delphinian Apollo, was 'guardian of harbours',[1] and a principal temple of Britomartis was the Cretan Khersonesos,[2] the port of Lyttos. Of her final Hellenized shape on that site the best record is supplied by the beautiful fifth-century intaglio of red cornelian found here, and illustrated at the end of this Section (Fig. 559).[3]

The maritime side of the Minoan Goddess has been fully illustrated in an earlier section of this Volume.[4] It has been shown, moreover, that, through an assimilation with Isis Pharia or Pelagia who played an important part in the later classical cult of the Mediterranean regions, the 'power of the sea' once wielded by the Minoan divinity was attributed to the Christian Saint, Pelagia, little churches dedicated to whom overlook the sites of now deserted Minoan harbour towns.[5]

In considering this remarkable tenacity of religious tradition in the Island one fact, the full import of which has been hardly sufficiently regarded, should be kept in mind. This is the survival to a comparatively late classical date of the indigenous Eteocretan race and language.

Youthful God identified with the Zeus Velchanos.

The analogy supplied by Diktynna and Britomartis would be alone sufficient to suggest that the male satellite of the Goddess who appears as Apollo Delphinios in later records of the Island may for long have still also borne a native name, representing that of the youthful male personage whom we see associated with the Goddess in Minoan religious scenes. Under one aspect, indeed, the name of this early forerunner of the 'Cretan Zeus' has been preserved for us. At Hagia Triada, where a local worship originally connected with the divinities of the Double Axes is shown to have survived to Hellenic times, the male partner, now ascendant, bears the name of Zeus Velchanos in dedications,[6] and Velchanos appears again at Phaestos as the name of young God holding a cock and seated, like Europa, on a tree-trunk, as seen upon tetradrachms of the fine style.[7]

[1] Kallimachus, *Hymn. in Dian.*, v. 39 λιμένεσσιν ἐπίσκοπος, v. 259 λιμενοσκόπος.

[2] Strabo, l. x, 4, 15 Χερρόνησος ἐν ᾗ τὸ τῆς Βριτομάρτεος ἱερόν.

[3] Obtained by me from the site of Khersonesos. Its upper surface is cut in the shape of a couchant lion, but of more elongated form than the usual Ionian type of ring-stone—perhaps an indication of some local fabric.

[4] See p. 248 seqq.

[5] See above, p. 250 seqq.

[6] See F. Halbherr, *Lavori eseguiti dalla missione italiana in Creta*, 1903–5; *Rendiconti dell' Acad. dei Lincei*, xiv, pp. 379, 380. The name is inscribed on the tiles of a Hellenistic shrine ('tempietto') in the dialectic form *Fεύχανος*. As Professor Halbherr remarks, p. 381: 'L'apparire del suo sacello sul posto dove i Festii preistorici adoravano il simbolo della *labrys* é un fatto, la cui imporanza non ha bisogno di esser posto in rilievo.'

[7] Svoronos, *Numismatique de la Crète ancienne*, Pl. XXIII, 24–6; Warwick Roth, *B.M. Cat.*, Crete, &c., Pl. XV, 10 and 12 and

Apollo Delphinios especially associated with this native Goddess in Crete.

Whatever the native name by which he may have been known, the persistent Cretan tradition makes Apollo Delphinios the special consort—the relationship being now, naturally, fraternal—of Artemis Diktynna, or Britomartis. In places, even, she bore the name *Δελφινία*.[1]

Temples and altars of this God were, according to Plutarch,[2] associated in many towns by the Greeks with those of Artemis Diktynna. Nor was the transformed and adapted cult of the old archer consort of the Minoan Goddess anywhere more deeply rooted than in Hellenic Knossos where the temple of the Delphinian Apollo took the first place. It may be gathered from inscriptions that copies of treaties between various Cretan cities [3] were preserved in this temple, the discovery of the site of which might throw much light on the history of Hellenic Crete.[4] This was in fact the central sanctuary of the Island.

His Knossian temple a central sanctuary.

p. xxxi. Hesychios confirms the identification of the youthful figure with *ὁ Ζεὺς παρὰ Κρησίν*, the Cretan Zeus: *Ϝέλχανος* (erroneously written *Γέλχανος*).

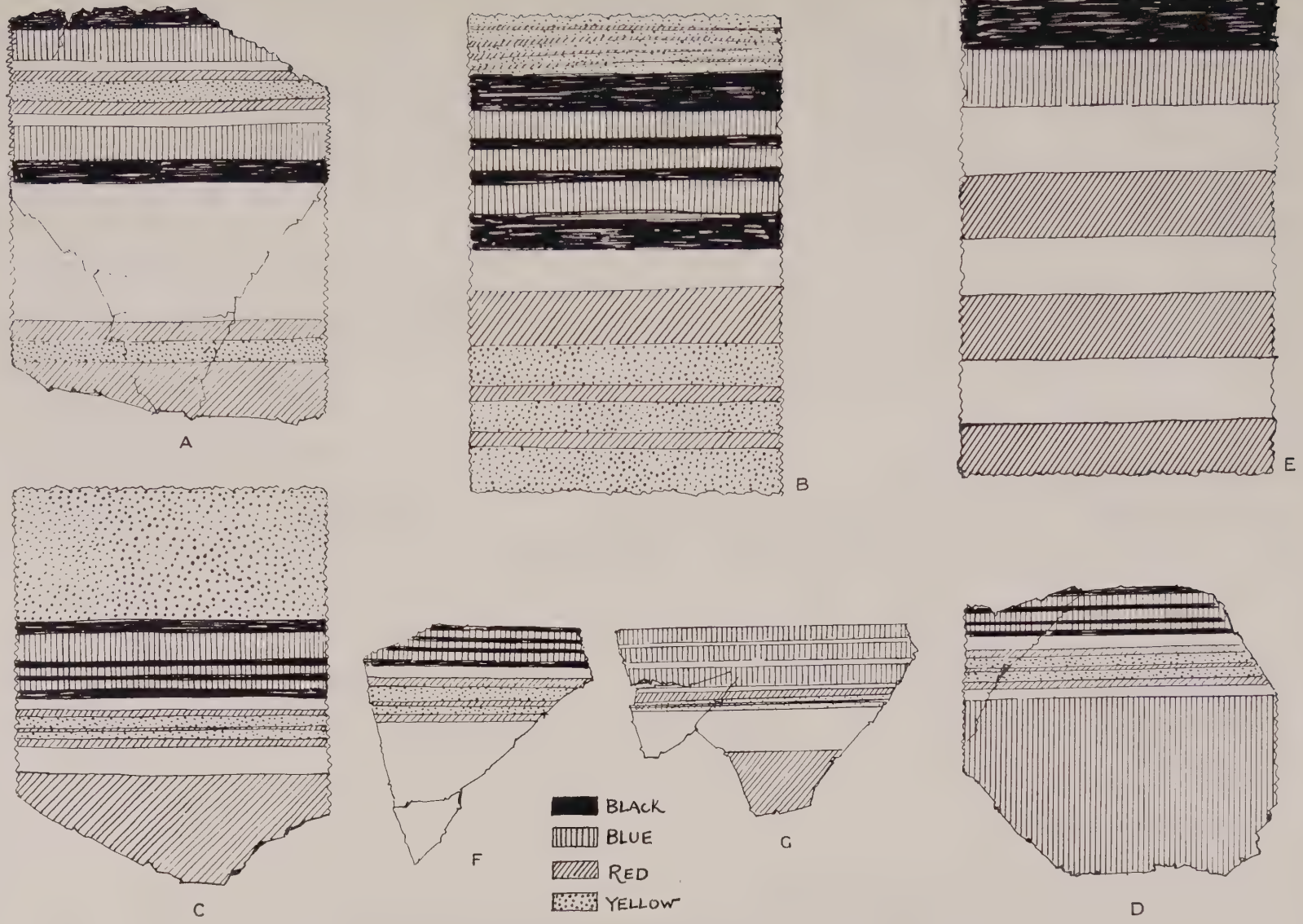
[1] In Attica and Thessaly she receives this epithet (see Farnell, *Cults of the Greek States*, i, p. 466).

[2] *De Sol. anim.*, x (p. 93 Rst.).

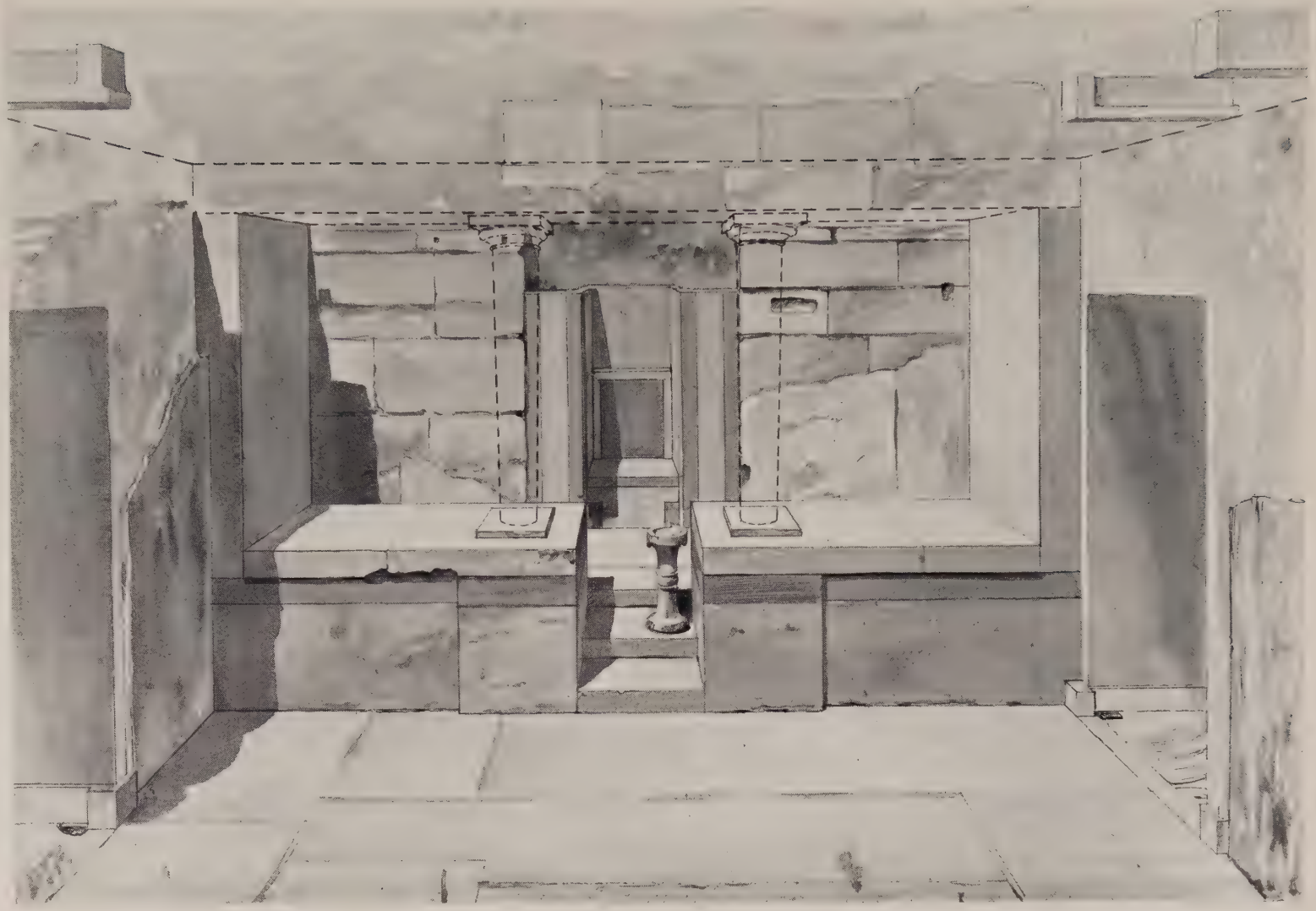
[3] E. g. that between Lato and Olous *C. I. G.* 2554, *θέμεν δε ἄλλαν στάλαν ἐν Κνωσσῷ ἐν τῷ ἱερῷ τῶ Ἀπόλλωνος τῶ Δελφινίου*. See, too, on this Hoeck, *Kreta*, iii, pp. 478, 479.

[4] It is to be hoped that the British School may some day succeed in discovering the site of this temple. It is tempting to connect with it part of an early Doric capital that lies on the steep a little East of the plateau of the acropolis hill of the Hellenic town.

Fig. 559. Artemis-Britomartis, holding Laurel-spray and Bow. Red Cornelian Intaglio from Site of the Cretan Chersonesos, *c.* 450 B. C. $(\frac{3}{1})$



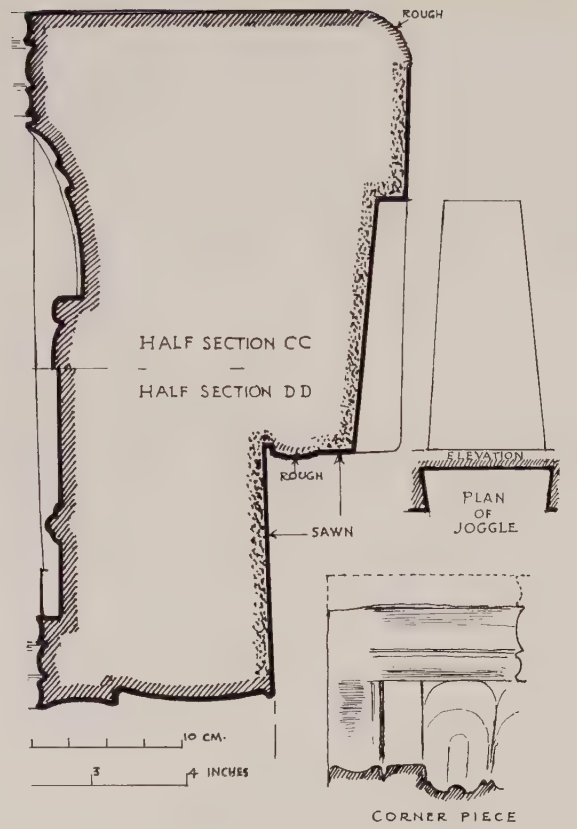
BORDERS OF PAINTED STUCCO PANELS: 'HOUSE OF THE FRESCOES', BY E. GILLIÉRON, FILS. ($\frac{2}{3}$) (See p. 460)



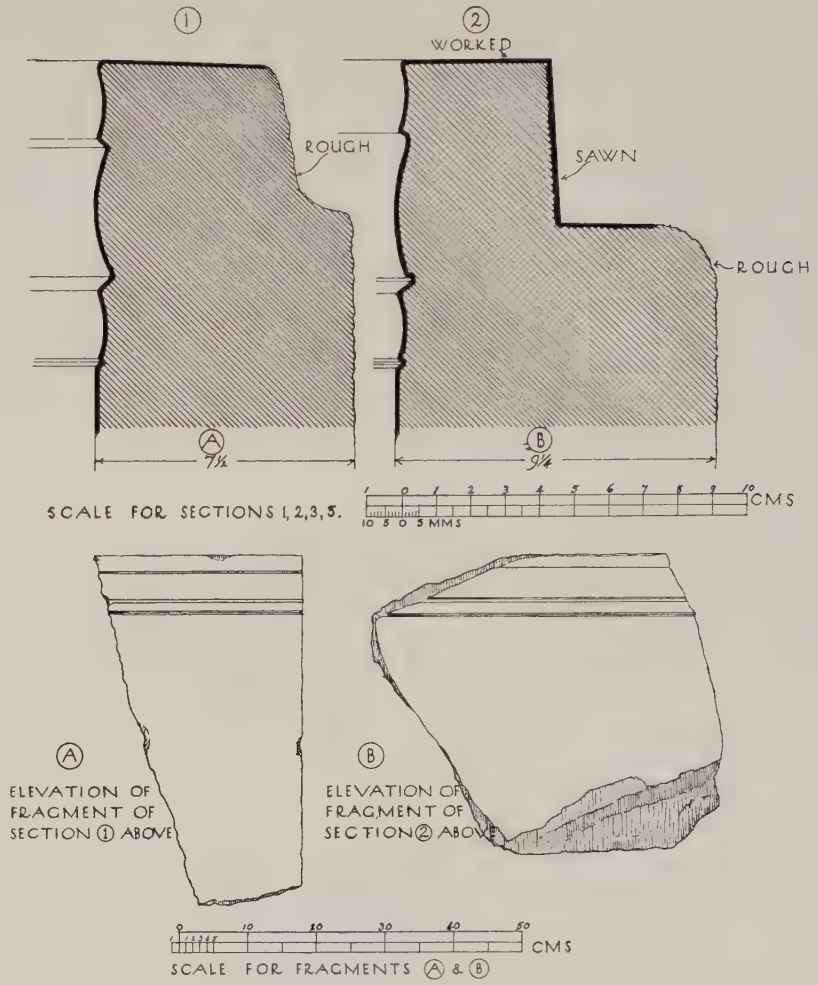
West End of Megaron of 'Royal Villa' as excavated, showing Niche with Remains of Seat of Honour: from Sketch by Theodore Fyfe. (See p. 404.)

A, EARLY STONE VESSELS FROM MAVRO SPELIO CEMETERY, KNOSSOS. (See p. 555 seqq.)

B, PAINTED TERRA-COTTA FIGURINE OF GODDESS HOLDING OUT INFANT SON (L. M. III *b*). MAVRO SPELIO CEMETERY, KNOSSOS. (See pp. 556, 557.)



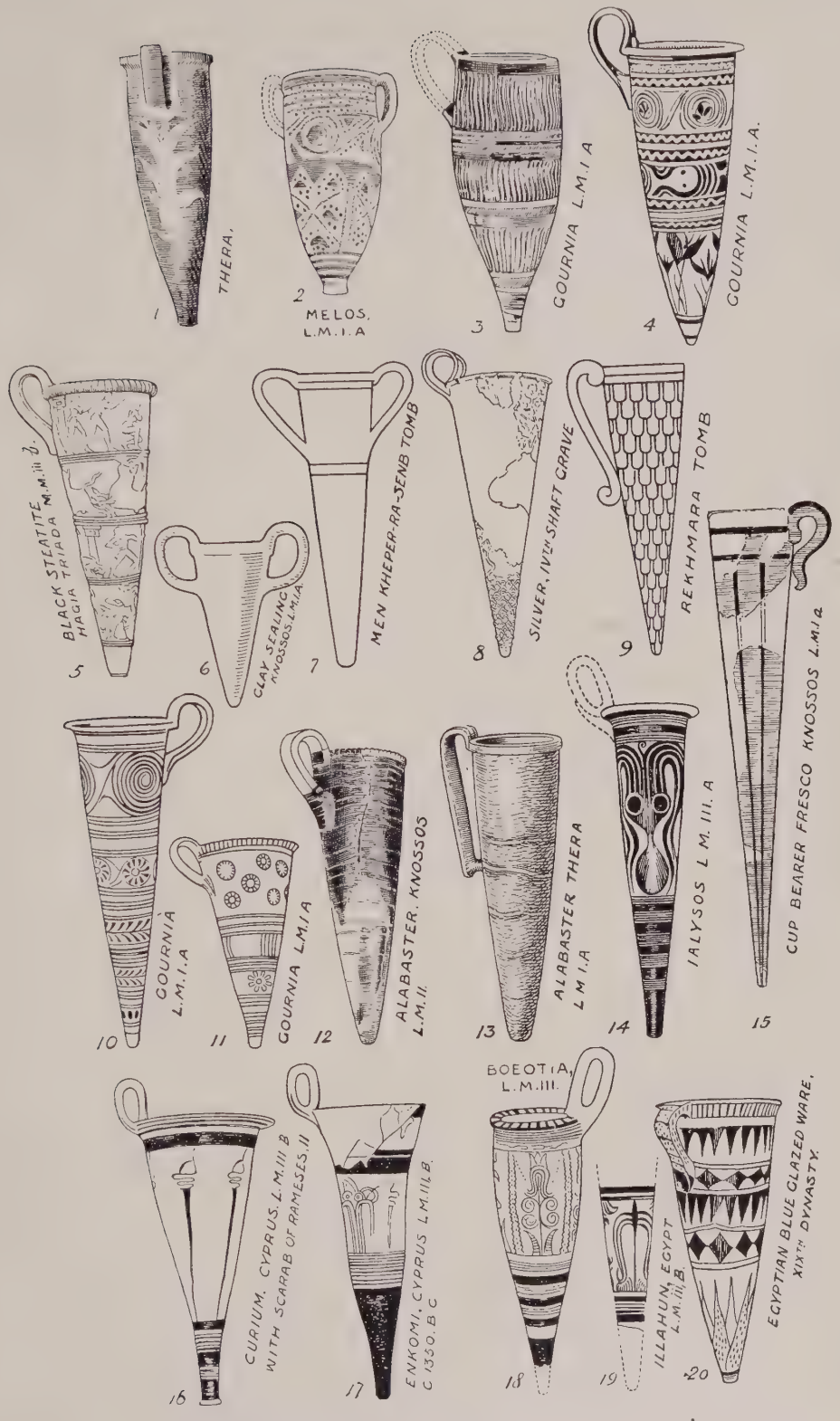
a, Sections of Half-rosette Band with Plan of Joggle and Corner-piece.



b, Sections and Elevations of Fragments of Dado Slabs.

Sections and Elevations of Sculptured Remains in Close-grained Stone from North-West Palace Entrance, by Theodore Fyfe. (See p. 594 seqq.)

PHOTOGRAPHIC VIEW OF WEST PORCH FROM BORDERS OF WEST COURT. (See p. 660 seqq.)
To left curving line of Base-slabs of Earlier Façade and part of Altar-base; to right single line of Paved Causeway running North to South abutting on double line running East to West.


1 THERA,
2 MELOS, L.M.I.A
3 GOURNIA L.M.I.A
4 GOURNIA L.M.I.A.
5 BLACK STEATITE HAGIA TRIADA M.M.III b.
6 CLAY SEALING KNOSSOS L.M.I.A
7 MEN KHEPER-RA-SENB TOMB
8 SILVER, IVth SHAFT GRAVE
9 REKHMARA TOMB
10 GOURNIA L.M.I.A
11 GOURNIA L.M.I.A
12 ALABASTER. KNOSSOS L.M.II
13 ALABASTER THERA L.M.I.A
14 IALYSOS L.M.III.A
15 CUP BEARER FRESCO KNOSSOS L.M.I.a
16 CURIUM. CYPRUS. L.M.III.B WITH SCARAB OF RAMESES II
17 ENKOMI. CYPRUS L.M.III.B. C 1350. B.C
18 BOEOTIA, L.M.III.
19 ILLAHUN, EGYPT L.M.III.B
20 EGYPTIAN BLUE GLAZED WARE, XIXTH DYNASTY.

COMPARATIVE TABLE OF FUNNEL-SHAPED 'RHYTONS'.

(See pp. 224, 705, 769.)

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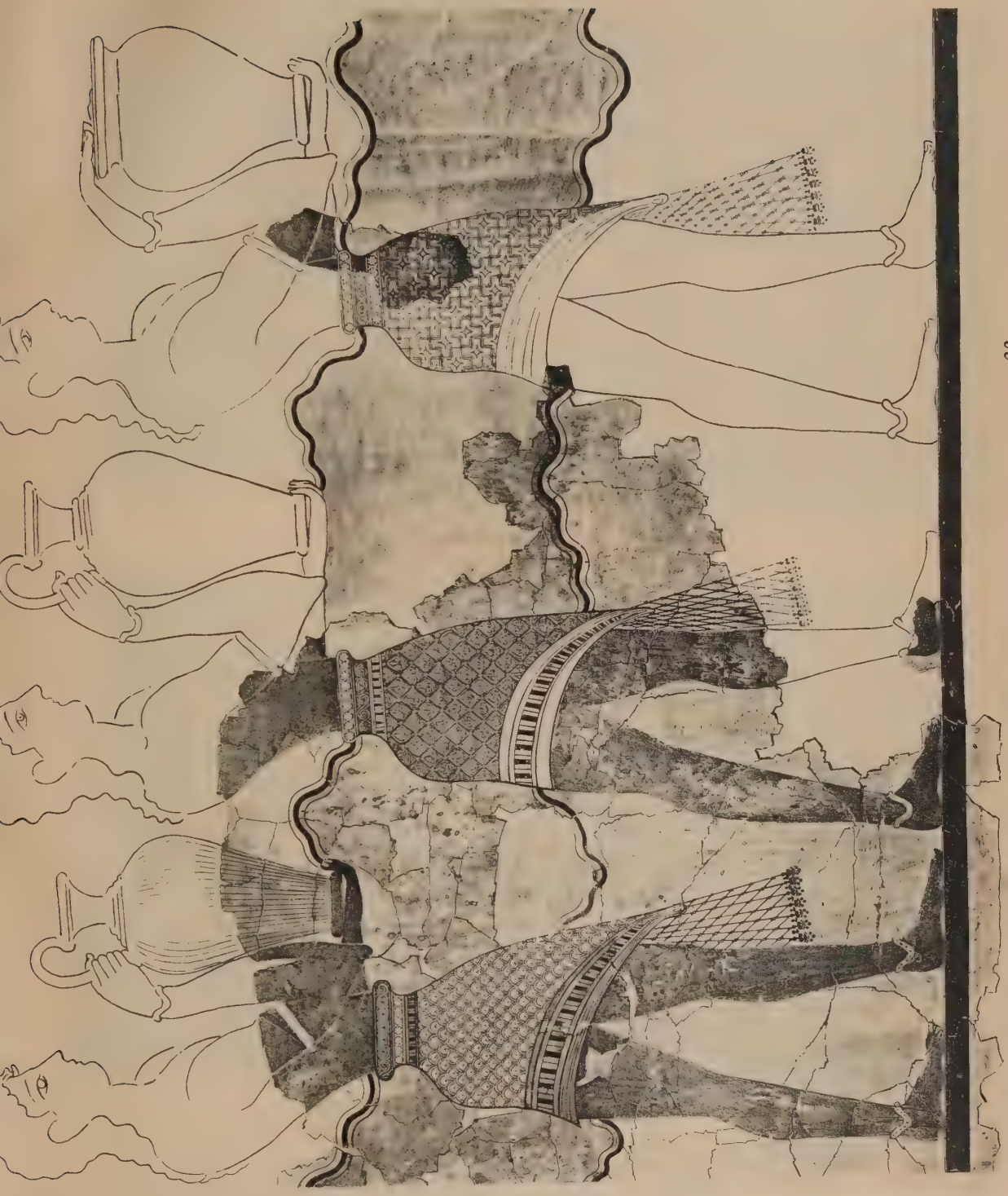
8 9 10 11 12 13 14 15 16 17 18 19

'Procession Fresco' b. (Nos. 8–19).


22
21
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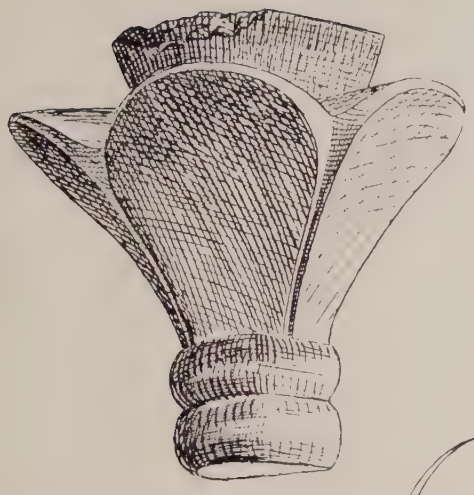
a

b

Minoan Tributaries from Keftiu : Tomb of Men-kheper'ra-seneb.
From drawings by Mrs. N. de Garis Davies. (See pp. 745, 746.)

Replica of 'Priest-King' Relief replaced in Original Position, with Columnar Border of Small Light-area opposite restored. (See p. 795.)



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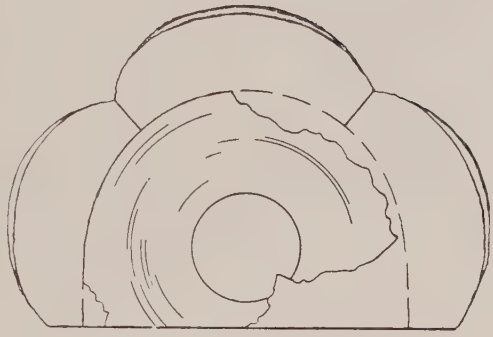

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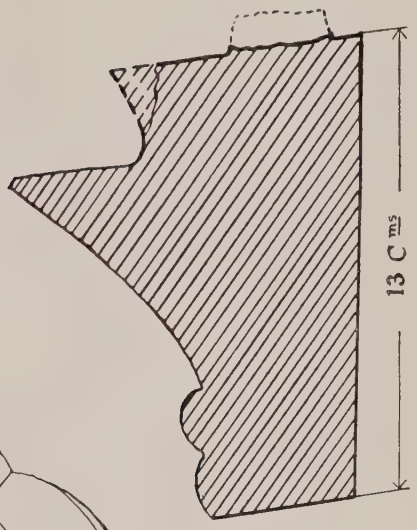

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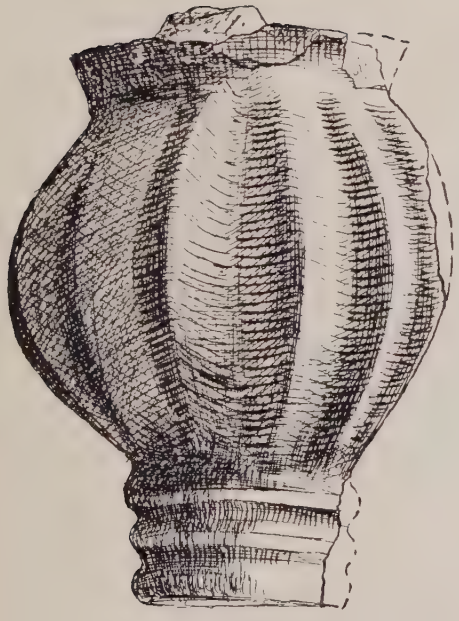

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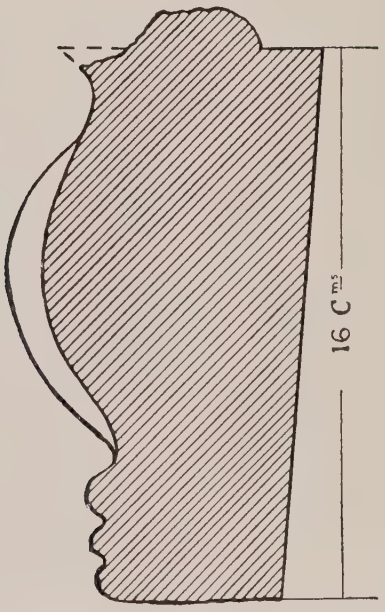
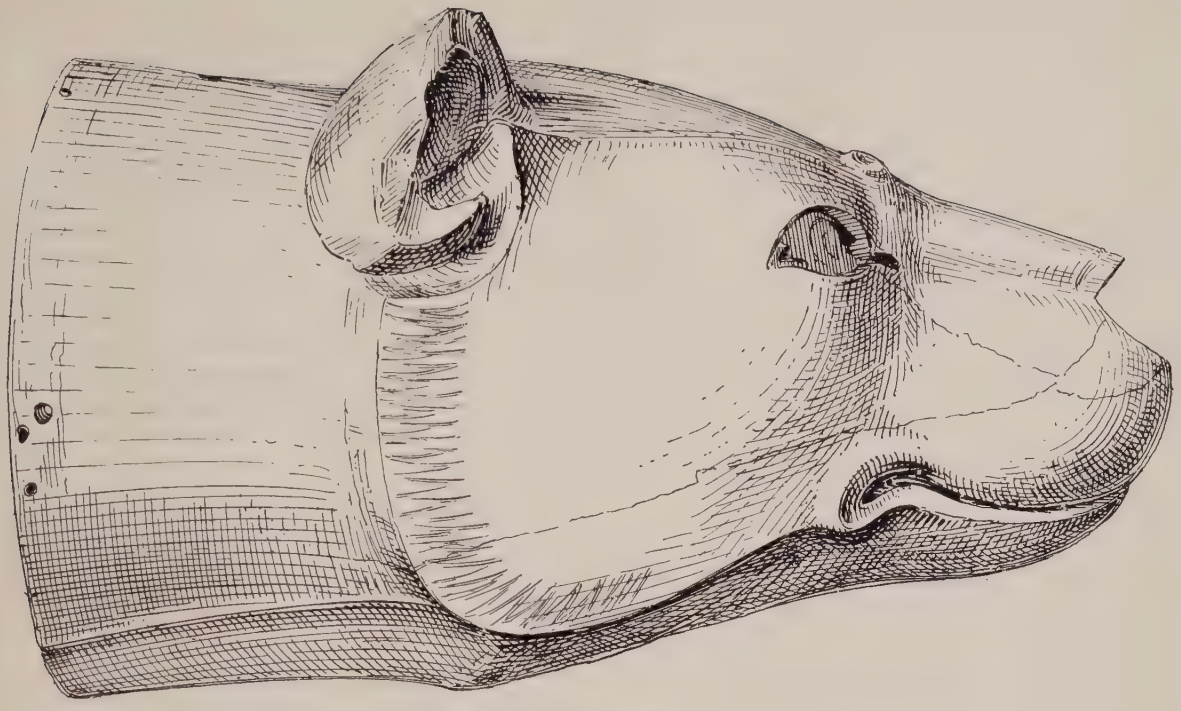


b

LIMESTONE HALF-CAPITALS FOUND ON BORDERS OF CENTRAL COURT, KNOSSOS, NEAR STEPPED PORCH. (See p. 814.)



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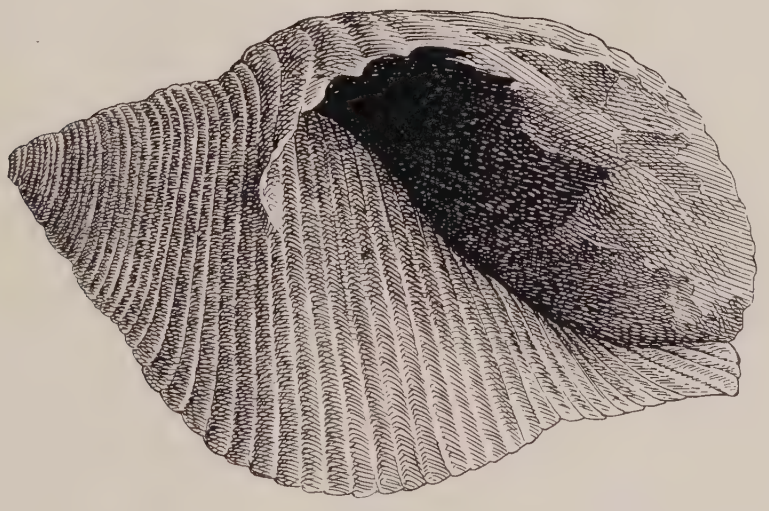

b

a. LIONESS'S HEAD 'RHYTON' OF MARBLE-LIKE LIMESTONE FROM TREASURY CHAMBER OF CENTRAL SANCTUARY, KNOSSOS, BY E. GILLIÉRON, PÈRE. (See p. 829.)

b. DOLIUM SHELL CUT OUT OF LIPARITE, A FORM OF VOLCANIC GLASS: HAGIA TRIADA. (LIP SLIGHTLY RESTORED.) (See p. 823.)

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